

SOUTH CENTRAL REGION
EMS & TRAUMA CARE COUNCIL



BIENNIAL TRAUMA PLAN

2001 - 2003

TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
MISSION STATEMENT.....	5
INTRODUCTION.....	6
EXECUTIVE SUMMARY.....	7
I. ADMINISTRATIVE COMPONENT.....	9
A. Regional Council Leadership.....	9
1. Organizational Chart.....	11
2. Other Agencies Involved in Specific Elements of Trauma System Planning and Development.....	12
3. Educational Institutions.....	13
B. Regional Council Operations.....	13
1. South Central Regional Council Structure.....	13
2. Regional Council Activities.....	14
3. Regional Guidelines.....	14
4. Regional System Development Cost/Regional Trauma System Projects.....	14
II. SYSTEM DEVELOPMENT.....	16
A. EMS/Trauma System Plan Development.....	16
1. Prehospital Needs Assessment and Existing Resources.....	16
2. EMS/Trauma Plan Development.....	16
3. Implementation of approved Regional Plans.....	17
4. Systematic Review/Evaluation of the Plan.....	17
B. Local Ordinances/Legislation	17
C. Local Trauma Systems Development Costs.....	18
III. INJURY PREVENTION AND PUBLIC EDUCATION.....	20
A. Current Status.....	20
B. Strengths, Weaknesses & Costs.....	22
C. Demographics.....	23
1. Comparison of State/SCR Injury Related Deaths.....	24
2. Related Deaths by Counties.....	24
D. Regional Injury Prevention Goals.....	25
E. Activity Measurement.....	27

IV. PREHOSPITAL.....	29
A. Communication.....	29
1. Current Status.....	29
a. Public Access.....	29
b. Dispatch.....	30
1. Training for Dispatchers Personnel.....	30
2. Dispatch Prioritizing.....	30
3. Provision For Bystander Care With Dispatch Assistance.....	30
4. Patient Care Procedure #1.....	31
c. Primary and Alternative Communication System.....	31
d. Multiple Agency On-Scene Communications.....	31
e. Roles of Other Public and Private Agencies.....	32
f. Evaluating communication System.....	32
2. Strengths, Weaknesses & Costs.....	33
Table A, Communication Center Survey.....	33
3. Geography & Demographics of the Area.....	33
4. Goal.....	35
B. Medical Direction of Prehospital Providers.....	36
1. Off-line and On-line Medical Direction.....	36
2. Current Status.....	36
Regional Medical Program Directors.....	36
3. Strengths and Weaknesses.....	36
4. Goals, Objectives, Strategies, Cost.....	37
C. Prehospital EMS and Trauma Service.....	37
1. Current Status.....	37
a. Verified Aid and Ambulance Service.....	37
b. Prehospital and Hospital Training Resources.....	39
c. Prioritizing and conducting Prehospital Training.....	39
d. Additional Public Safety Personnel.....	40
• Air Ambulance Service.....	41
• Air Ambulance Resources.....	42
• Regional Helipads and Airports.....	42
• Helicopter Safety Training.....	44
2. Strengths and Weaknesses of EMS System.....	46
3. Demographics.....	46
D. Trauma Verified Agencies by County.....	47
1. Current Status.....	47
2. Strengths and Weaknesses.....	59
3. Demographics.....	60
4. Goals.....	61
5. Table B. Recommended Minimum & Maximum Numbers for EMS Verified Trauma Services.....	63
E. Patient Care Procedures.....	66
1. Status.....	67
2. Strength & Weaknesses.....	67
3. Demographics.....	67

4.	Goals.....	68
F.	Cross Country or Cross/Inter-Regional Prehospital Care.....	68
V.	DESIGNATED TRAUMA SERVICES.....	69
A.	Current Status.....	69
1.	Current Trauma Services Resources.....	69
2.	Trauma Service Resources for Trauma Specialty Injuries.....	73
3.	Remaining Need for Trauma Services.....	73
4.	Trauma Service Training Needs.....	74
a.	Trauma Service Workforce Resources.....	74
b.	Trauma Service Training Needs and Resources.....	75
c.	Strengths and Weaknesses.....	76
B.	Demographics.....	77
C.	Goals.....	78
1.	Methods to Establish or Re-establish Recommended Minimum/Maximum Recommendations for Regional Trauma Services.....	78
2.	Regional Recommendations for Designated Trauma Services.....	79
VI.	DATA COLLECTION.....	80
VII.	EMS AND TRAUMA SYSTEM EVALUATION.....	81
	Addendum's.....	82
	Acronyms	

MISSION STATEMENT

The Department of Health Office of EMS & Trauma developed the following Mission Statement for the Trauma System:

To establish, promote, and maintain a system of effective emergency medical and trauma care services. Such a system provides timely and appropriate delivery of emergency medical treatment for people with acute illness and traumatic injury, and recognizes the changing methods and environment for providing optimal emergency care throughout the State of Washington.

Trauma is the number one killer of Americans between the ages of one and thirty-four. Virtually all trauma deaths are considered avoidable. National statistics have proven that trauma deaths are greatly reduced when an organized trauma system is in place. A successful trauma system is more than a vision and commitment from Emergency Medical Service (EMS) agencies and health facilities acting as trauma services, it is a commitment from society as a whole. Washington State embarked on just such a commitment when the State Legislators passed the 1990 Trauma Bill. The Trauma Bill states that it is in the best interest of the public to establish an efficient and well-coordinated statewide EMS and trauma care system.

The South Central Region EMS & Trauma Care Council wholeheartedly endorses this mission statement and adds this additional goal - to minimize the human suffering and costs associated with preventable trauma related mortality and morbidity. To accomplish these missions the Regional Council has developed a trauma plan utilizing already established EMS agencies and health care facilities.

The Regional Council's goal for EMS was to establish a tiered response of first responders, basic life support (BLS) ambulances and advanced life support (ALS) ambulances with working rendezvous agreements. Through assessment of needs and resources, the Regional Council recommends minimum and maximum numbers for trauma verified EMS services. Over the years, EMS agencies have been established in areas where need was identified. EMS agencies have increased their trauma verification levels to meet additional needs identified in the trauma plan.

The Regional Council also recommends levels and locations for designated trauma services throughout the Region. Although the levels of trauma service designation have not been met in all instances, all health care facilities identified in the Trauma Plan are participating in the Trauma System. Truly, some trauma services have assumed their roles in unique and precedent setting ways.

INTRODUCTION

The South Central Region followed its established Trauma Plan and Patient Care Procedures (PCP) Review Guidelines to update and revise this FY 2002/03 Trauma Plan. Local EMS and Trauma Care Councils, Medical Program Directors (MPDs), designated trauma services, EMS agencies, and emergency dispatch centers have been asked and provided the opportunity to give updates and suggestions for revisions. Changes to the trauma plan are as follows:

Minimum and maximum numbers of trauma verified EMS services for Benton, Columbia, Kittitas, and Yakima Counties have been reviewed and revised to reflect recommendations for EMS trauma verified agencies including those who have moved from BLS to Intermediate Life Support (ILS) levels.

The twelve approved Regional PCP's are unchanged. Supporting County Operating Procedures (COPs) from Kittitas, Benton, Franklin and Yakima Counties have had minor updates. New COPs have been established and submitted from Walla Walla County. All PCPs and COPs are submitted with this trauma plan.

Recommendations for minimum and maximum numbers and levels of designated trauma services, pediatric designated trauma services, and designated trauma rehabilitation services have been reviewed. Due to the fact that health care facilities designating at levels lower than Regional Council recommendations, minimum and maximum trauma service numbers have become confused over the years. The Regional Council has not changed its recommendations and numbers submitted in this plan reflect the original and current recommendations for locations and levels of trauma services. The Regional Council continues to encourage trauma services to increase designation levels to the recommendations in this Trauma Plan.

There are no higher than state minimum standards proposed by the South Central Region EMS & Trauma Care Council.

EXECUTIVE SUMMARY

The South Central Region, located in South Central Washington State, includes six counties: Kittitas, Yakima, Benton, Franklin, Walla Walla, and Columbia. There are four urban areas, the Cities of Yakima, Walla Walla, Ellensburg, and the Tri-Cities (Richland, Kennewick, and Pasco). The mild sunny climate coupled with sophisticated irrigation systems makes agriculture the Region's primary industry. Regional population is 487,500 with an average age of thirty to forty-five. The Region's population is greatly influenced by the seasonal influxes of migrant farm workers for our agricultural industries.

A major employer within the Region is the Hanford Nuclear Reservation where hazardous nuclear waste is stored. This industrial reservation precipitates unique EMS response that requires additional training of both pre-hospital responders and trauma service personnel. The Hanford contractors take an active part in integrating their unique needs into local emergency management plans and Regional EMS and Trauma System plan. The Umatilla Army Depot in Oregon just across the Columbia River from the South Central Region stores agents of chemical warfare.

One of the greatest challenges to a trauma system within the Region are the long EMS response and transport times due to our large rural areas. National statistics show that rapid transport of trauma patients to trauma centers significantly increases survival rates. National trauma system studies advocate rapid emergency transport by EMS helicopter. The South Central Region does not have EMS helicopter service within its geographical boundaries. EMS helicopters located in Seattle, Moses Lake and Spokane can provide some scene response but the benefit of faster transport by helicopter is lost. The Region does have fixed wing medical air transport services available for inter-facility transfers between trauma services. The U.S. Army MAST helicopter located on the Yakima Training Center also is available for wilderness rescue as needed.

Analysis of Regional EMS services established the following facts:

- Urban/suburban areas have EMS agencies that are a mix of public and private ALS ambulance services.
- Rural areas have volunteer BLS First Responder aid services and BLS ambulance services with long response and transport times.

The Regional Council encouraged and promoted trauma verification of its EMS agencies. One of our first **goals** was to support improving trauma patient care in the rural areas by establishing an organized tiered EMS system of First Responder aid services who are backed by BLS ambulances who rendezvous with ALS ambulances. Several areas developed additional First Responder aid services and a number of rural BLS ambulances have increased EMS skill levels to ILS.

All thirteen of the Region's health care services have been trauma designated. Regional trauma services range from modern medical centers in the urban/suburban areas to small rural hospitals and even a freestanding emergency clinic.

Injury prevention and public education are the only true cure for the epidemic of trauma. The Region now provides this important element through agreements with SAFE KIDS Coalitions. Injury Prevention activities within the Region include such projects as child car seat installation programs and head injury prevention activities coupled with bike and sports helmet fitting and distribution projects.

Twelve PCP's have been developed to provide specific directions for how the trauma system will function within the Region. The local EMS & Trauma Care Councils have developed COPS for even more specific local direction. The Regional Council has established Regional Guidelines that provide an established system and internal structure that assure uniformity of input and update of the trauma plan and Regional PCPs.

EMS communications continues to be an inherent weakness of the Regional trauma system. Past projects to assist EMS communications have not been an overall success. VHF H.E.A.R. radio frequency is the Region's communication link between EMS and trauma services. The Regional Council will continue to explore new directions and possibilities for EMS & trauma system communications.

Enhanced 9-1-1 emergency telephone access is available Region-wide. The Regional Council facilitated a standardized emergency medical dispatcher (EMD) training course that provides locally based EMD training.

EMS continuing medical education (CME) and ongoing trauma education programs (OTEP) have been established through Regional contracts with the five local EMS and trauma care councils. Four Regional colleges regularly provide EMS training classes such as First Responder, EMT, and Paramedic. Trauma training courses for trauma service personnel such as Trauma Nurse Core Curriculum (TNCC) and Pediatric Advanced Life Support (PALS) are available through local colleges or individual trauma services.

The trauma services provide the regional Continuous Quality Improvement (CQI) Committee program. The CQI Committee meets quarterly to analyze trends, review Trauma Registry statistics, and identify trauma system issues.

The Regional Council recognized that trauma registry data would be the key to continued development and implementation of a trauma system. Designated trauma services will now collect and submit both EMS and trauma service trauma registry data. The Regional Council will continue to promote and encourage continued submission of Trauma Registry data.

The Regional Council has long accepted its leadership role for development of the trauma system. The Regional Council will continue to advocate and promote the continuing evolution of the Regional and Statewide trauma system.

I. ADMINISTRATIVE COMPONENTS

A. REGIONAL COUNCIL LEADERSHIP

Regional Council leadership is mandated through the 1990 Trauma Legislation. The South Central Region EMS & Trauma Care Council is the lead organization in developing and implementing a trauma system. The Regional Council has been organized to meet the needs of the South Central Region. The Regional Council is a non-profit corporation with a board of twenty-five directors recommended by the local EMS & trauma care councils and appointed by the Department of Health. Each local EMS & Trauma Care Council has five representatives to the Regional Council. Local government, EMS agencies and health care facilities are mandatory categories with the other two categories representing the following groups:

- Consumer
- Law enforcement
- Private ambulance
- Physician
- MPD's
- Injury prevention and public education organizations
-

Regional Council activities are fully funded through state trauma grants. The Regional Council maintains an office staffed by an administrator and part-time administrative assistant. The Regional Council works closely with its five local EMS & Trauma Care Councils, five MPDs, ten Regional emergency dispatch centers and other like-minded organizations in developing and implementing the trauma system.

The Regional Council has developed operating guidelines for the trauma system through PCPs. Washington Administrative Code (WAC) directs that PCPs be developed that specifically identify the following:

- Level of EMS personnel to be dispatched to a trauma patient
- Identification of a trauma patient through use of the state trauma triage tool
- Level of the designated trauma service to first receive a trauma patient
- Name and location of other higher levels of trauma services to receive trauma patients should interfacility transfers be necessary.

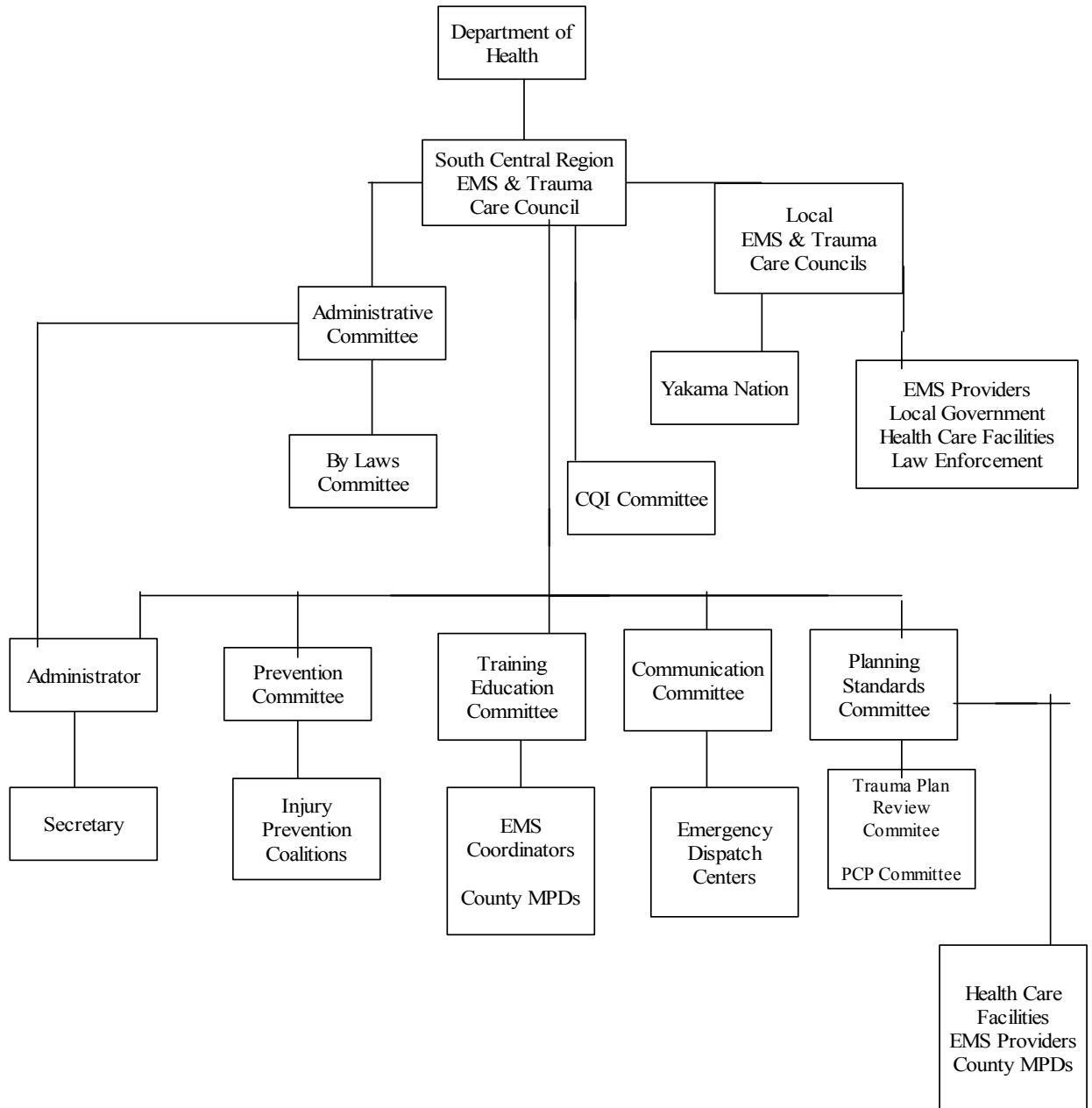
The PCP Committee, a subcommittee of the Planning & Standards Committee, develops, reviews and updates Regional PCPs. The Planning & Standards Committee and its subcommittees are made up of members from the Regional EMS agencies (both private and public), trauma services, and government and professional agencies interested in trauma system development. The Regional Council's Planning & Standards Committee also developed Regional Council "Guidelines" that provides a process and time lines for updating or changing PCPs and the Regional Trauma Plan.

The Regional Council facilitates pre-hospital OTEP and CME through contracts with the local EMS & trauma care councils.

A vital part of the Regional Trauma System is injury prevention and public education activities. The Regional Council has long recognized that the only cure for the epidemic of trauma is prevention. The Regional Council in the past employed Injury Prevention Public Education Coordinators, however in 1999, the Regional Council reorganized its injury prevention public education process. The Regional Council is providing injury prevention grants to three SAFE KIDS coalitions.

Local EMS & Trauma Care Councils provide local leadership in trauma system development. The local councils determine their own membership. Representatives from EMS agencies, trauma services, emergency dispatch centers, emergency management agencies, government officials, and others interested in EMS and trauma care are included in local membership. Each local EMS council recommends five representatives to the DOH who are appointed to the Regional EMS & Trauma Care Council. The local EMS & trauma councils provide input and recommendations for trauma system development through these representatives on the Regional Council as well as through direct input as outlined in the Regional Guidelines. Local councils also work closely with their MPDs and provide both initial and continuing EMS and trauma training education.

SOUTH CENTRAL REGION ORGANIZATIONAL CHART



1. SOUTH CENTRAL REGION EMS & TRAUMA CARE COUNCIL
ORGANIZATIONAL CHART

2. Other Agencies Involved In Specific Elements of Trauma System Planning and Development

a. Hanford Nuclear Reservation, located in Benton County, provides ALS ambulances that respond to EMS incidents on the site and near their borders. Hanford Fire Department participates on both the Mid Columbia EMS and Trauma Council and the South Central Region EMS and Trauma Council. Hanford Site emergency dispatchers are trained in Regional Criteria Based EMD.

b. Columbia Basin Dive Rescue (CBDR) is an all-volunteer, non-profit agency that interfaces with fire, law enforcement and local EMS agencies to provide emergency water rescue service and assist with water recoveries of drowning victims, criminal evidence, autos, etc. They provide service in Benton, Franklin and Walla Walla Counties in Washington State and Umatilla and Morrow Counties in the Oregon State. CBDR also conducts an ongoing drowning prevention program that reaches several thousand adults and children annually within the region, funded through state and federal grant system, as well as community dollars raised within the areas served. Water safety programs include Lifeguard Larry, Reasons People Drown, and Waterproofing Your Family. The agency assists other dive teams, such as Columbia County, with missions upon request and hosts training classes both locally and regionally. As an authorized Department of Emergency Management agency, CBDR also may assist other agencies throughout the state upon request. CBDR participates in both the Mid Columbia and the Regional EMS & Trauma Care Councils.

c. The U.S. Army MAST Helicopter Unit from the Yakima Training Center works closely with EMS providers in Yakima and Kittitas Counties. They provide emergency helicopter rescues for remote wilderness incidents.

d. The U.S. Army Umatilla Chemical Depot, located in Oregon State across the Columbia River from Benton County, has facilitated multi-county and bi-state disaster planning, training, and drills as part of the Chemical Stockpile Emergency Planning Process (CSEPP) plan for destruction of nerve gas at the Umatilla site. EMS providers and trauma services from Benton, Franklin and Walla Walla Counties have participated in these multi-county and bi-state disaster drills. The U.S. Army also has provided emergency warning communication equipment, decontamination equipment, and medical supplies to both EMS agencies and health care facilities located in Benton, Franklin and Walla Walla Counties. The Washington State Department of Health, through its toxicology division, contributes both training and consultation.

e. Volpentest Hazardous Materials Management Emergency Response (HAMMER) Training Facility is a unique training facility located in Richland that is involved in advanced training for emergency response agencies of all kind. They provide HAMMER classes offering a wide scope of training dealing with Hazardous Materials and Emergency Medical Service Response to Hazardous Material Incidents that meet the National Fire Protection Association 473 "Standard for Professional Competency for EMS personnel responding to Hazardous Material Incidents." Classes also are offered for first responders (fire,

law enforcement, and pre-hospital) dealing with Weapons of Mass Destruction. Regular programs in rescue related classes such as confined space rescue, low to high angle rescue techniques, and Swift water Rescue Technician I & II Courses. Courses in trench rescue, building collapse rescue, and rail rescue will be available for EMS agencies.

f. Yakama Native American Reservation

The South Central Region has one Native American Reservation, the Yakama Indian Nation. This Reservation covers a large portion of Southern Yakima County and has several small towns, vast areas of wilderness with limited access, and high incident of traffic related crashes and fatalities. The Regional Council continues to invite and encourage the Yakama Nation to participate in trauma system development, however, participation has been limited. The Yakama Nation operates ILS trauma verified White Swan Ambulance Service.

3. Educational Institutions

Educational institutions play an important role in Regional trauma system development by providing both EMS and health care provider training and education. The following Regional colleges provide EMS and trauma service education:

a. Walla Walla Community College, Walla Walla, WA.

Provides a nursing program, EMT training, First Responder training, and ALS continuing education including Advanced Cardiac Life Support (ACLS), PALS, and Basic Trauma Life Support (BTLS) for nurses, physicians, paramedics, EMTs and First Responders. A college representative participates on both local and Regional EMS & Trauma Care Councils.

b. Columbia Basin Community College, Pasco, WA.

Provides a nursing program, a paramedic program, and EMT and First Responder training.

c. Yakima Valley Community College, Yakima, WA.

Provides a nursing program.

d. Central Washington University, Ellensburg, WA.

Provides a paramedic program and EMT training. Representatives have participated on both the local and Regional EMS & Trauma Care Councils.

B. REGIONAL COUNCIL OPERATIONS

1. South Central Regional Council Structure

The Regional Council has an organized committee structure to direct different aspects of trauma system development. The following committees have been established:

a. Administrative Committee, responsible for the supervision of the Regional contract with DOH and daily operation of the Regional Council Office, reports to the Regional Council.

b. By-laws Committee, responsible for maintenance of Regional By-Laws and provides guidance at council meetings for Robert's Rules of Order.

c. Communication Committee, responsible for evaluating Regional communication issues and making recommendations to Regional Council for the state-wide EMS and trauma system communication plan. They developed and facilitate the Regional Criteria Based EMD training for Regional emergency dispatch centers.

d. Planning/Standards Committee, responsible for developing and updating the Regional Trauma Plan and Patient Care Procedures.

e. Prevention Committee, responsible for Regional injury prevention and public education programs and represents the Regional Council while working with injury prevention coalitions.

f. Rehabilitation Committee, responsible for developing recommendations on numbers and levels of designated trauma rehabilitation services and assisting in developing the trauma rehabilitation portion of the Regional Trauma Plan.

g. Training and Education Committee, is responsible for facilitating Regional EMS CME and OTEP programs for prehospital providers. They are responsible for recommending distribution of Advanced Trauma Training grant funds allocated for physicians and trauma service personnel.

h. The Continuous Quality Improvement (CQI) Committee, while not an actual Regional Council committee, is comprised of representatives from the designated trauma services, EMS agencies, and rehabilitation facility representatives. This committee works closely with the Regional Council in developing and implementing the regional CQI Plan.

2. Regional Council Activities

The Trauma System has been implemented in most areas for several years. Rural all volunteer EMS agencies continue to have EMS and communication equipment needs that cannot be met within their agency budgets. State EMS Needs Grants are an avenue for these agencies to obtain grant funds that can help to alleviate some of these ongoing or new needs. In the South Central Region, EMS communication system needs continue to plague the evolving Trauma System.

3. Regional Guidelines

The Regional Council developed "Guidelines" that provide a process and time lines for updating or changing Regional Patient Care Procedures and the Regional Trauma Plan.

4. Regional System Development Costs/Regional Trauma System Projects

The Regional Council has been operating on a "bare bones" budget for several years. Continuing budget cuts will limit the Regional Council's operation to less than a status

quo operation. Many of the Region's responsibilities and activities will be eliminated. Outside funding sources for trauma system development and maintenance are limited.

The Regional Council has monitored soft match (in kind services) estimate for years. The following areas of volunteer time is estimated:

- Participation at Regional Council meetings and committee meetings
- Volunteer EMS Agency Response
- Volunteer EMS CME and OTEP
- Other volunteer time i.e., public education and injury prevention activities

The hours provided by EMS volunteer agencies is estimated at \$10,736,514.00 to maintain EMS response in the rural areas for one year. Add in the other volunteer hours and the total is \$10,910,805.00 per year for the South Central Region alone. The state could not possibly replace the valuable service provided by these EMS agencies. Continued cuts in the budget that funds CME, OTEP, and needed assistance to these volunteers, could result in loss of EMS services and ultimately loss of lives.

The Regional Councils have not been set up to be self sustaining. Training and Educational Programs that could be marketed to other states cannot be sold because of State regulations that prevent marketing of programs developed with state grant funds. Regional councils do have the ability to apply for grants from other sources. The regions have found that national research that shows "overall outside grant funds" are decreasing, are becoming more competitive and are more limited in scope is in fact a reality.

II. SYSTEM DEVELOPMENT

A. EMS/TRAUMA SYSTEM PLAN DEVELOPMENT

Regional Council Trauma Plans are the foundation for the State Trauma System Plan. Regional Trauma Plans are developed and written by Regional Councils; submitted biannually to DOH; reviewed by the Trauma Steering Committee; and forwarded to DOH for final approval.

The South Central Region's Trauma Plan is a living document and always in the process of change. The Regional Council requests and encourages input for continued trauma system planning and implementation from the five local EMS & trauma care councils, EMS agencies, designated trauma services, MPDs, and emergency communication centers.

1. Pre-hospital Needs Assessment and Existing Resources

The Regional Council's Planning & Standards Committee analyzed and evaluated the Region's demographics, topography, climate, environment, sociology, and economic issues as they related to trauma patient care. The Committee surveyed and gathered information from EMS and trauma service resources. Local EMS Councils, EMS agencies, MPDs, dispatch centers, and trauma services were asked to identify trauma system needs. Keeping in mind the large rural and wilderness areas, the Regional Council set about to design a trauma system for the South Central Region. Each local EMS & trauma care council was asked to evaluate EMS and trauma system needs. In the South Central Region maps were developed using established fire district boundaries to define EMS response areas. Fire district boundaries were utilized because they were established and available. Fire departments that do not provide EMS services are encouraged to do so, however, there is no mandate for fire departments to provide EMS services. The Regional Council also requested input from local councils on locations and levels of designated trauma services based on resources available.

Trauma Service needs assessment and existing resources are found on page 78 of this trauma plan under *Methods to Establish or Re-establish Recommended Minimum and Maximum Recommendations for Regional Trauma Services*.

2. EMS/Trauma Plan Development

The Regional Council values input from its EMS agencies, health care facilities, MPDs, and dispatch centers and continues to seek information and input. The Regional Council continues to survey all these entities for current trauma care resources and to identify additional trauma care needs.

The Regional Council is responsible for disseminating trauma system information to local EMS & Trauma Care Councils. The Regional Council provides this information through regular reports at local council's meetings made by Regional Council representatives. In addition, minutes from Regional Council and subcommittee meetings are sent to all local EMS & Trauma Care Council Chairmen and to county MPDs.

The Regional Council has created Regional Guidelines that provides a process and timelines for local EMS & trauma councils to make requests for emergency changes to the trauma plan or PCPs outside of the regular timeline established in the Trauma Plan and PCP Review Guideline.

3. Implementation of the Approved Regional Plans

The Regional Trauma Plan has been in the process of implementation since its inception. EMS personnel were trauma trained and EMS agencies trauma verified through Regional Council recommendation in the Trauma Plan. Local EMS & Trauma Care Councils developed EMS “service area” maps. All Regional health care facilities designated as trauma services. Regional PCPs have been developed to direct the actual operation of the trauma system. MPDs and local EMS & Trauma Care Councils have developed local protocols and county operating procedures to further define local direction through Regional PCPs. Trauma training and Regional PCP’s have been incorporated into all Regional EMS training and CME. The trauma services established a regional CQI Committee that reviews Trauma Registry statistics, trauma cases and analyzes trauma system trends, as data is available. In the past, the Regional Council provided data collection-training programs to assist in increasing data submitted to DOH for the Washington State Trauma Registry.

4. Systematic Review/Evaluation of the Plan

The Regional Council has developed a process and timelines outlined in the Regional Guidelines. They provide for timely input, update, and revision of the Trauma Plan and PCPs from local EMS & Trauma Care Councils, MPDs, trauma services, EMS agencies and others involved in the Regional trauma system. The Regional Council reviews and incorporates information and suggestions into the trauma plan as appropriate and utilizes the input in developing future goals.

B. LOCAL ORDINANCES/LEGISLATION

The South Central Region does not have a standard set of ordinances or legislation that governs the operation of the local EMS agencies. Ambulance ordinances that govern ambulance operation are established in the City of Walla Walla, Walla Walla County, and in the cities of Yakima and Sunnyside. The Cities of Kennewick, Richland, and Pasco have ambulance ordinances and levy taxes for ambulance services through the local fire departments. Yakima and Walla Walla Counties have countywide EMS tax levies. In Walla Walla County, the levy provides for the operation of the county EMS system and funds part of the ambulance service provided by Walla Walla City County Ambulance. Yakima County’s EMS levy provides for the education, training, and coordination of EMS First Responder Aid Services. Benton County Fire District # 2 and Benton County Fire District # 6 have EMS levies that provide for purchase of EMS equipment and ambulance service expenses.

Franklin and Kittitas Counties have hospital districts that provide ambulance services as part of their hospital levies. In Franklin County, Franklin County Hospital District # 1 supports five volunteer BLS ambulances providing EMS response to northern portions of Franklin County. Kittitas County Hospital District # 2 supports the ALS ambulance service located in Cle Elum. Neither of these hospital districts utilize funds for actual hospitals.

C. LOCAL TRAUMA SYSTEM DEVELOPMENT COSTS

Local trauma system development and implementation costs are difficult to project and predict. In the prehospital arena, there are a variety of entities involved in a trauma system, from the all-volunteer rural fire department First Responder aid services, to large metropolitan full time paid fire departments and private ambulance services. In the realm of hospitals and trauma services, many changes are taking place that will effect trauma care such as cut backs, mergers, and managed care. The Arthur Anderson study estimated a loss of \$32 million statewide for uncompensated and under-compensated trauma care including prehospital, physician, trauma services and rehabilitation services.

2SSB 5127 provides both trauma system participation and needs grants to EMS agencies and trauma patient care reimbursement for trauma services and physicians. These 2SSB5127 trauma grant funds are dedicated funds generated from the sale of vehicles and moving traffic violations.

In addition, local EMS agencies receive funds from a variety of sources including county and local taxes, third payer reimbursement, fee for service, other state and federal grants, and EMS levies. Yakima and Walla Walla Counties have EMS levies were renewed in 1999. Through these countywide levies, each fire district providing EMS response receives a percentage of the levy funds. Funds are distributed using a formula based on fire district population, assessed valuation, number of EMS runs per year, and level of EMS service provided by the agency such as First Responder aid unit or ambulance.

The City of Yakima and Walla Walla County also have ambulance ordinances that regulate the care and/or transport of ill or injured persons by ambulance, first-aid vehicles, or non-emergency transport vehicles. Benton County FD #2 and Benton County FD #6 have special EMS levies specifically targeted for the purchase of EMS equipment and expansion of services to meet expanding EMS needs.

The Region has several private for profit ambulance services that operate on a fee for service basis. In the City of Yakima, ambulance services are provided by two private ALS ambulance services, American Medical Response (AMR) and Advanced Life Systems (ALS). In the City of Prosser, Prosser Memorial Hospital Ambulance provides ALS ambulance service. Private industrial ambulance services are located at the St. Michael Winery in Patterson that provides a BLS licensed service, and Hanford Fire Department ALS ambulance on the Hanford Nuclear Reservation. Two private “non-profit” all volunteer BLS ambulance services provide response in the town of Waitsburg in Walla Walla County, Waitsburg Ambulance and in Dayton in Columbia County, Columbia County Ambulance. These two agencies operate on a fee for service basis only.

Fire department based ambulance services are as follows:

- BLS ambulance services in Kittitas County is located in the Cities of Cle Elum and Roslyn and provided by the volunteer city fire departments.

- ALS ambulance service in Walla Walla County is provided by Walla Walla City County Fire and Ambulance Service and BLS ambulance service is provided by Walla Walla Fire District #5.
- The Sunnyside Fire Department provides ALS ambulance service in the City of Sunnyside.
- ALS ambulance service in the cities of Richland, Pasco, Kennewick, and Ellensburg are provided by the city's fire departments.
- Combinations of city taxes, third party payers and fees for service fund all of the above ambulances.

Two ambulances supported by tax funds for public hospital districts are located in North Franklin County by North Franklin Public Hospital District #1 BLS Ambulance and in western Kittitas County by Kittitas Public Hospital District #2 ALS ambulance service in the town of Cle Elum. In addition, White Swan ILS Ambulance Service on the Yakama Reservation is funded through the Yakama Nation.

III. INJURY PREVENTION/PUBLIC EDUCATION

The only cure for trauma is prevention. It is through public education and increased awareness of potential injury, that both personal and public behaviors can be changed and thus decreasing injury and death due to trauma. The Regional Council has long understood that the general public is not aware of trauma system development and developed a goal to heighten public awareness of trauma system development through injury prevention and public education programs.

A. CURRENT STATUS

National studies show that changing adult behavior involves changing life styles and negative habits established over many years. Attempting to changing adult behavior can consuming huge amounts of time and utilize a large amount of resources with limited success. These same national organizations have long advocated programs for children as the most effective tool for changing personal behavior. Using this information, the South Central Region has focused most of its injury prevention activities on safety programs for children and youth. Past injury prevention programs have been head injury prevention through helmet use, bike and pedestrian safety, farm safety for children and youth and a Regional program called FABULAS (First Aid Basics You Learn At School). For further detail on past Regional Injury Prevention activities and programs see earlier additions of the South Central Region Trauma Plan.

Based on Regional injury statistics, the above national studies and overall knowledge of the injuries within the Region, the Prevention Committee and its coalitions have targeted the five following categories for injury prevention messages and programs:

1. Children - infants through high school with emphasis on head injury prevention and bike and pedestrian safety.
2. Impaired drivers
3. Adults, children and infants – proper use of seat belts and child safe restraints with special emphasis on low-income families.
4. Fall safety in the elderly
5. Water Safety

The Regional Council is working with SAFE KIDS coalitions located in Walla Walla/Columbia, Benton/Franklin, Yakima and Kittitas Counties. The only concern the Regional Council had with the new direction of utilizing SAFE KIDS coalitions was that the focus was limited to children. However, the SAFE KIDS coalitions that the Regional Council is supporting have committed and are actively working toward broadening their programs to include a broader range of age ranges including the elderly. Each coalition provides the Regional Council with a workplan for their annual injury prevention and public education projects. The workplans are reviewed by the Prevention Committee and accepted by the Regional Council.

The Regional Prevention Committee meets bi-monthly with coalitions representatives to review progress on programs and review new ideas and strategies. A great networking forum has been established within the Region that draws coalitions from all of the counties. The following coalitions are providing the Regional Injury Prevention and Public Education activities:

For Walla Walla and Columbia Counties, **Blue Mt. SAFE Kids Coalition** through Walla Walla City/County Fire Dept. Coalition membership includes the following:

- Walla Walla County EMS
- St. Mary Medical Center
- Walla Walla General Hospital
- Dayton General Hospital
- Walla Walla Chapter of the Red Cross
- Walla Walla School District
- Salvation Army
- Baker Boyer Bank
- Daryl Graves GM Motors
- Blue Mt. Mall Management
- Cellular One
- Superior Sign

For Benton and Franklin Counties, **Benton Franklin Health District SAFE Kids Coalition** with the following members:

- Franklin County School District
- Catholic Family and Child Services
- Kennewick School District
- Franklin County Sheriff Department
- Kennewick Fire Department
- Richland Fire Department
- ECEAP
- Richland School District
- BFCAC Resource & Referral
- CHC La Clinica
- SARC
- United Way
- Tri Cities Shared (Trauma) Service
- Head Start
- Benton County Sheriff Department
- Columbia Basin Dive Rescue
- Washington State Patrol
- Kadlec Medical Center

For Yakima SAFE Kids Coalition with the following members:

- Advanced Life Systems Ambulance
- American Medical Response Ambulance
- American Red Cross
- Burlington Northern Santa Fe Railroad
- Camp Fire Boys & Girls
- City of Yakima Fire Department
- City of Yakima Parks & Recreations
- Department of Social & health Services
- Epic
- ESD-106
- Gymnastics Plus

Manning Dog Training
Providence Yakima Medical Center
Pepsi Bottling Company
The Memorial Foundation
THINK FIRST
Washington State Patrol
US Cellular
Waddell & Reed, Inc.
Wapato Fire Department
Washington State Patrol
Yakima Canned Food Outlet
Yakima County Health District
Yakima County Office of EMS
Yakima County Fire Prevention Association
Yakima County Sheriff Department
Yakima Pediatrics
Yakima School District Transportation
Yakima Valley Memorial Hospital-Passport to Health
Yakima Valley Memorial Hospital-Pediatrics

For the Kittitas County Chapter of SAFE Kids, membership includes
Kittitas County EMS/TC Council
Kittitas County Community Health & Safety Network
Kittitas County Sheriff Dept
Kittitas County Health Department
Washington State Patrol

In addition, the Regional Prevention Committee has established a Drowning Prevention Program. Boards have been developed for life vest loaner programs at targeted water locations throughout the Region.

B. STRENGTHS AND WEAKNESSES AND COST

The strengths of all injury prevention activities are the many dedicated volunteers who give hours and hours of service. The continuing weakness for all injury prevention and public education programs is lack of funds. The Regional Council has been able to assist the SAFE KIDS Coalitions with grant funds to facilitate their established and new projects. All injury prevention coalitions and agencies continually explore additional funding sources. Injury Prevention and public education activities seem to be an area where “outside” grants are still available. These organizations also participate in many varying fund raising activities. The state Department of Health office of EMS and Injury Prevention has received Federal Injury Prevention Grants for specific statewide programs such as drowning prevention. However, as grant funds become smaller, competition becomes enormous and grant applications become very specific in nature.

The South Central Region divides the \$35,000.00 Injury Prevention Grants allotted to the Region with a formula based on area and population of each of the four SAFE KIDS Coalitions. The four coalitions cover all five counties within the Region. Each Coalition submits a workplan listing goals and deliverables for each year. Facilitating the SAFE

KIDs Coalition activities have increased Regional injury prevention program contacts and deliverables beyond the Regions greatest expectations.

A weakness and yet a great potential for injury prevention and public education within the South Central Region, is its diverse ethnic population. Injury prevention and public education are universal problems and provides avenues to establish working relationships with many ethnic organizations and communities. The Regional SAFE Kids coalitions strive to reach both the seasonal and resident Spanish speaking population with safety messages in Spanish. In recent years, the Region has experienced an influx of Russian and Asian populations. Additional challenges and resources have become necessary to overcome language barriers and cultural differences.

The Yakama Native American Reservation in Yakima County provides yet another potential weakness as well as an opportunity. For years, the Yakama's have resisted a seat belt law for the reservation. In 2000 a seat belt law was successfully passed and implemented. The next hurdle will be a child safety restraint law. In the past the Regional Council sent cradleboards to be tested for safety versus child car seats. Even with concrete statistics, the tribe has resisted a child safety restraint law. The Yakima SAFE Kids coalition has several established programs through reservation schools and with the Yakama Indian Health Service. Yakima SAFE Kids provides a safety fair and bike rodeo in conjunction with Toppenish High School every year. The students use this event as their public service project and provide the manpower for booths and help with bike rodeos. Injury Prevention and Public Education information is also made available at Treaty Days and at Pow Wows held throughout the year.

C. DEMOGRAPHICS

In past years, the Region had analyzed data concerning injury and death due to trauma to establish a base for injury prevention activities and evaluate trends. Statistics from previous years cannot be compared to statistics from 1999 due to the following information from the Department of Health, Office of Vital Statistics:

Note: BE VERY CAUTIOUS ABOUT INTERPRETING CHANGES IN MORTALITY BETWEEN 1999 AND PRIOR YEARS.

Beginning with 1999 data, causes of death are coded using the 10th revision of the International Classification of Diseases (ICD-10). Changes in tabulation lists, changes in classification, and changes in rules for selecting underlying causes of death will create a discontinuity in mortality trends over time. The National Center for Health Statistics is conducting a comparability study by double coding all U.S. 1996 death certificates in both ICD-9 and ICD-10. From this study, comparability ratios are calculated by dividing the number of deaths for a selected cause of death classified by ICD-9 by the number of deaths classified to the most nearly comparable cause of death by ICD-10. The comparability ratios can be used to account for changes in the ICD revision.

1. Comparison of State and SCR Injury Related Deaths

From Washington State Vital Statistics 1999

	WA State	Percent	South Central Region	Percent
# All Deaths	43,793	100%	3,724	100%
# Injury Deaths	3,033	4 %	272	7%
MVC Deaths	538	18%	61	22%
Fall Deaths	334	11%	19	7%
Drowning Deaths	115	4%	10	4%
Burn Deaths	54	2%	5	4%
Suicide Deaths	819	27%	62	2%
Homicide Deaths	190	6%	18	0.5%
Other	872	29%	97	36%



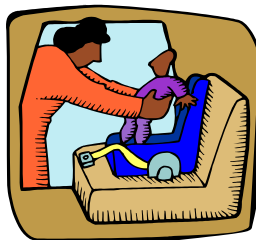
2. Injury Related Deaths by Counties

1999 Deaths Due to Trauma	Benton	Columbia	Kittitas	Franklin	Walla Walla	Yakima	Total
MVC	15	1	4	8	8	25	61
Falls	6	0	1	0	3	9	19
Drowning	1	0	0	1	2	6	10
Burns	0	0	0	0	1	4	5
Other	11	2	0	10	7	67	97
Total Injuries	33	3	5	19	21	111	192
Suicide	19	1	2	3	10	27	62
Homicide	2	0	1	0	0	15	18
Totals	21	1	3	3	10	42	80

Data Source: Washington State Department of Health, Statistics, Death Certificates

D. REGIONAL INJURY PREVENTION GOALS

The Region's **over all long term injury prevention goal** has been and always will be to "reduce preventable deaths and disabilities among people residing in and traveling through the South Central Region." The Regional Council distributes its injury prevention grants to four established like-minded coalitions. The Regional Council is working with four SAFE KIDS coalitions and utilizing the Regional injury prevention grant funds to promote these established coalition programs. By working with coalitions, the Regional Council has been able to facilitate and promote much larger and broader injury prevention and public education activities. An added benefit is to also reduce inefficient duplication of programs. The following is an overview of short term and current goals and objectives established by the Regional Prevention Committee and the SAFE KIDS coalitions:



Goal: Child Car Safety Restraints Used and Installed Correctly.

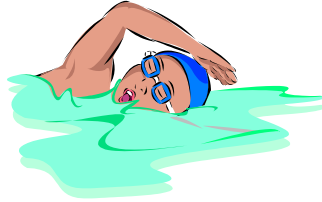
Objective: Provide instruction and assure that car seats are installed properly and provide car seats to those who cannot afford them. **Strategies:** All SAFE Kids Coalitions provide car seat programs such as *SAFE Kids Buckle Up* along with installation checkpoint clinics. Both the Benton/Franklin and the Yakima SAFE Kids Coalitions have had and continue to plan frequent training programs for those involved in installing and checking car seats. EMS and law enforcement agencies have actively participated in these training programs. Additionally, all the coalitions are working with the Migrant Clinics to provide both proper car seat installation training and assistance in programs to provide low or no cost child car seats for low-income families. The Coalitions are also working with GM in their car seat safety promotions. **Measurable Action:** Each coalition will report to the Regional Council monthly the number of car seats checked and distributed at each clinic. They will also report the number of individuals trained each month for proper car seat installation.



Goal: Safety Helmet Use & Safety Education Programs

Objective: Reduce injuries and death associated with bicycle, in-line skating, skateboarding, and horseback riding incidents. **Strategies:** All coalitions have well-established programs for distribution of bike helmets. Each quarter fire departments in the Benton Franklin County area plan to have a bike helmet fitting clinic and helmets will be given to children and parents who cannot afford or do not have helmets. Bike safety information is always provided as apart of these

programs. With the development of the multiuse helmet, new opportunities are available for distribution of safety helmets to skateboarders and inline skaters. **Measurable Actions:** Each coalition reports both the number of helmets distributed and the type of programs where helmets are distributed each month. Benton Franklin Health District SAFE Kids met its goal to distribute 2000 helmets in 2000. When available, Wildfeet are distributed with the low light pedestrian safety message in conjunction with these programs.



Goal: Drowning and Water Safety Programs within the Region

Objective: Kick off of the Regional *Kid's Don't Float*, Drowning Prevention program. **Strategies:** Yakima SAFE Kids is working with the Pepsi Company to produce sign boards with water safety information and loaner life vests (personal flotation devices.) **Measurable Actions:** The boards will be located at the Kids Fishing Pond in Columbia Park in Benton County, at Hanson Lake in Yakima and in a yet undetermined location in Kittitas County. A future goal will be to provide a board for Walla Walla County. **Strategies:** Richland Fire Department will continue its life vest loaner program established last year. **Measurable Actions:** All areas where life vests are loaned will provide the Regional Council with statistics as available.



Goal: Reduce Injuries and Death Due to Falls in the Elderly.

History: Statistics show that falls especially for the elderly are the second leading cause of unintentional death within the South Central Region. **Objective:** Implement fall safety programs for senior citizens. **Strategy:** Kittitas County and Walla Walla SAFE Kids will continue their established *Falls in the Elderly* programs. Yakima SAFE Kids is actively pursuing establishing a falls in the elderly program such as **Tread to Safety** as a part of their programs. Benton Franklin SAFE Kids provides a program to seniors entitled, *Visiting Grandmother's House*. The program provides home safety and poisoning prevention information. Tread to Safety or similar fall prevention programs will be incorporated into this program. **Measurable Action:** Each participating entity will provide the number of contacts made and estimated number of brochures distributed.

Goal: Regular Safety Articles in Local Newspapers and Other Publications.

Objective: Provide Safety Messages on a regular basis to local newspapers.

Strategies: Yakima and Walla Walla SAFE Kids Coalitions have regular scheduled safety related columns in their local newspapers. Benton Franklin SAFE Kids has frequent articles and columns that address safety issues and programs. **Measurable Action:** Each coalition will provide monthly copies of articles.



Goal: Burn Safety Programs

Objective: All SAFE Kids will work with Edith House and Fire Prevention programs in cooperation with the Regional Fire Departments. **Strategies:** Distribute fire safety information to schools, trauma services, libraries, child care organizations, Head Start, ECEAP, Birth to Six, WIC, First Steps and other organizations as appropriate. **Measurable Action:** Copies of information and contacts will be reported in the monthly reports.

Goal: Participation in Local Safety Fairs and Programs.

Objective: Regional SAFE Kids Coalition participation in public programs and health fairs. **Strategies:** All SAFE Kids Coalitions have numerous programs planned for such public activities as Safety Saturday and Family A Fair. Part of the agreement with the Region is to advertise the Region's sponsorship of their programs. **Measurable Action:** Report coalition activities in the monthly report along with documentation of Regional Councils name on safety information.

Goal: Provide SAM (Safety Always Matters) in Walla Walla County.

Objective: EMS personnel and fire fighters from Walla Walla Fire Department, Walla Walla FD #4, and College Place FD provided this safety programs targeting kindergarten through fifth grade in Walla Walla and Columbia County Schools. **Measurable Action:** Report the number of children contacted in this program.

Goal: Increase injury prevention activities in Kittitas County. Objective:

Provide FABULAS (Firs Aid Basics You Learn at School) and Risk Watch programs in Kittitas County. **Measurable Action:** Report the number of programs and children contacted in the monthly Regional report.

E. ACTIVITY MEASUREMENT

Injury prevention and public education are nationally recognized as the only known cure for the trauma epidemic. Changes in behavior and trauma incidents prevented are extremely difficult to measure and document. The measurement of changes in behavior and trauma incidents prevented must be acknowledged as a "soft" science and is no more adaptable to specific outcomes than crime prevention or crime reduction. Law enforcement has collected intangibles and controlled data (i.e. number of drivers, drivers education, classes, population totals, population by ethnic percentages, etc., etc.) for many years to demonstrate successful accomplishment of their goals. The Regional

Council will make every attempt to measure the success of its injury prevention and public education programs, but there needs to be a concerted effort to insure that written conclusions do not receive more emphasis than honest and imaginative efforts.

IV. PRE-HOSPITAL



A. COMMUNICATION

1. Current Status

a. Public Access (e.g., 911, E911, etc.)

The telephone and 9-1-1 is the most frequently used method for the public to access the EMS system or to report emergency situations. Washington State Enhanced 9-1-1 legislation facilitated establishing public safety answering points or 9-1-1 centers for all counties statewide. E 9-1-1 dispatchers are available in all counties within the South Central Region and centralized E 9-1-1 centers have been established in most areas. All counties have completed the re-addressing of their rural areas making it easier for EMS and emergency personnel to find specific locations.

South Central Region Dispatch Centers

Columbia County

Columbia County Sheriff Department Dispatch Center, located in the City of Dayton, receives emergency calls and dispatches EMS for all of Columbia County and EMS in Walla Walla Fire District #2.

Kittitas County

Kitt Comm, located in the City of Ellensburg, receives emergency calls and dispatches all EMS for Kittitas County

Benton County

Southeast Communication Center, located in the City of Richland, receives emergency calls and dispatches EMS for the eastern portion of Benton County.

Prosser Police Dispatch Center

Prosser Police Dispatch Center, is located in the City of Prosser, receives emergency calls for the southwestern portion of Benton County and provides dispatch information to American Ambulance.

Franklin County

Franklin County Sheriff Dispatch Center, located in the City of Pasco, receives emergency calls and dispatches EMS to all of Franklin County.

Walla Walla County

Walla Walla Emergency Dispatch Center, located in the City of Walla Walla, receives emergency calls and dispatches EMS in all of Walla Walla County.

Yakima County

Yakima Public Communications Center, located in the City of Yakima, answers 9-1-1 calls and dispatches EMS for all Upper Yakima County.

Yakima Valley Fire District #5 Dispatch Center, located in the City of Toppenish, receives emergency calls and dispatches EMS for the Lower Yakima Valley.

b. Dispatch

Emergency dispatchers are usually the first link of the EMS and trauma system activation. Emergency dispatchers provide EMS responders with essential information about location and nature of the emergency calls. National statistics show that centralized dispatch centers and Emergency Medical Dispatch trained dispatchers provide *quicker* EMS dispatching, provide *better* information and *more accurate* directions for EMS responders and *save lives* by providing pre-arrival instructions.

1. Training for Dispatch Personnel

The Regional Council has facilitated an EMD training course utilizing the Criteria Based Dispatch/Emergency Medical Dispatch (CBD/EMD) training program. The Regional Council sponsored two CBD Instructor Training course so that “on site” EMD training would be available. Using local instructors greatly reduces the cost of EMD training. Currently, all ten communication centers have at least some EMD trained dispatchers.

2. Dispatch Prioritizing

Criteria Based Emergency Medical Dispatch guidelines and other recognized EMD courses provide specific medical criteria so that dispatchers are able to determine the severity of an illness or injury and the appropriate level of EMS response to be dispatched. Caller interrogation training assists the dispatcher to determine the chief complaint, obtain information specific to the incident, determine if a patient is in cardiac arrest or not breathing, and provides pre-arrival instruction on Cardio-Pulmonary resuscitation (CPR) or other aid the caller can give the patient while EMS is in route. Twenty-five chief complaint categories, 19 medical condition categories and 6 trauma emergency categories are used to determine the severity of the call and pre arrival instructions to be given. Categories are based on specific signs, symptoms, mechanism of injury, or circumstance that indicate the level of severity of a patient’s medical condition.

3. Provisions For Bystander Care With Dispatcher Assistance

Criteria Based Emergency Medical Dispatch training provides dispatchers with pre-arrival instructions that can range from simple first aid to life saving instructions such as unconscious/breathing normally, CPR, choking, and childbirth. Pre-arrival instructions have been proven to benefit the patient and can also be of psychological benefit to the caller as well.

4. Patient Care Procedure #1 Dispatch

The Regional Council has developed Patient Care Procedure # 1 Dispatch. This PCP restates that trauma verified EMS agencies are to be dispatched to all known or suspected injury incidents. The PCP further states that the purpose of the PCP is to minimize “dispatch interval” and to get trauma trained EMS personnel to the scene of an incident as soon as possible.

c. Primary and Alternative Communication Systems

Emergency scene communications provide medical control with vital patient information including whether or not trauma triage criteria has been met, "on scene" assessment, and observations of EMS providers. EMS providers are the “eyes” for medical control or emergency department physicians. Medical control uses on scene evaluations to direct treatment, patient destination, and receiving facility response prior to patient arrival.

In eastern Washington, including the South Central Region, the VHF HEAR radio frequency is the primary EMS communication frequency. The EMS agencies within the Region continually strive to improve and update their current VHF HEAR system.

Columbia County, with its mountainous terrain and limited radio tower facilities, experiences many areas where EMS radio communications are not possible. DOH assisted with the purchase and installation of two Skycell Plus Telephones that utilize a communication satellite. One Skycell Plus Telephone was placed on Columbia County Ambulance and the other was located at Dayton General Hospital. For several years, these Skycell phones were a useful source of EMS to trauma service communication for Columbia County. The monthly cost of approximately \$75.00 per phone and the \$10.00 per minute charge have proven too costly for Columbia County and the cell phone service has been discontinued. The South Central Region EMS & Trauma Care Council is exploring other agencies in the Region that could afford and benefit from this unique resource.

Cellular telephones are a popular tool for EMS to trauma service communication. Many Regional trauma services have established dedicated phone lines for EMS calls. In some remote areas, EMS providers have found that they can establish cellular telephone contact where radio systems failed.

d. Multiple Agency On-Scene Communications

EMS providers often need to communicate with other agencies such as law enforcement, fire department, and public utility agencies while in route or on the scene of an emergency calls. In most locations, EMS, fire departments, and law enforcement agencies utilize different radio frequencies. While some EMS agencies carry frequencies used by police and state patrol, in other areas, the communication link is through emergency dispatch centers. EMD training for dispatchers once again becomes crucial to providing accurate current information and coordination of communication at EMS scenes. The advent of cell telephone technology has provided an additional direct line that can be used by multiple agencies for communications.

e. Roles of Other Public & Private Agencies

All counties are mandated by RCW to have mass casualty disaster plans developed by their County Emergency Management Departments. These disaster plans address such topics as EMS response, health care facility response and emergency communications resources. The Regional Council asked all local EMS & trauma care councils to review their county's disaster plans to assure that the EMS portions of the plans were current and reflected EMS and trauma system operations in their county. County disaster plans are tested annually. Health care facilities also are required to have two disaster drills a year. These drills include EMS agencies and communications centers.

The Umatilla Chemical Storage Depot, a nerve gas storage area, located in northeastern Oregon State, Hanford Nuclear Reservation, a nuclear waste storage site, and Regional airports are required to test their disaster plans on a routine basis. EMS, communication centers, and health care facilities participate in these drills also. Both the Umatilla Chemical Storage Depot and the Hanford Nuclear Reservation have purchased, installed, and test emergency warning communication equipment for Regional EMS agencies near their borders such as Benton County Fire Department #6.

The first HEAR frequency, 155.340 MHz, is designated for EMS field communications with trauma service's emergency departments. Inter-hospital communication (hospital to hospital) was to be through the use of HEAR radio systems second frequency, 155.280 MHz. However, this second frequency is most often utilized as a paging system for "on call" or "in-house" hospital personnel. Few health care facilities have written policies or practiced any communication plans that address radio communications with other health care facilities. Regional trauma services surveyed stated that they have never tested the HEAR system to see if radio communications can be established with other Regional health care facilities. Presently, inter health care facility communications are exclusively by telephone contact.

In the Cities of Richland, Kennewick, and Pasco, the Tri-Cities Trauma Service, a tri-designated trauma service, has facilitated a phone in each of the three emergency departments, who automatically calls the other two EDs phones when the receiver is picked up. This enables one ED to immediately talk with the other two EDs and obtain such important information as availability of surgeon, operating room, CT, and Intensive Care Unit (ICU) beds. The immediate access of ED information from the other facilities enables EMS to be directed to the resources needed for care of a trauma patient.

f. Evaluating Communication System

Quality management of EMS communications systems involves cooperation from many different entities. Many emergency communications centers are managed by law enforcement agencies that regard EMS dispatching as a minor part of their operation. The Regional Council is using the Regional CBD/EMD training program and instructors to encourage development of CQI for communication centers. Some more progressive communication centers already have begun the

process of establishing CQI programs. Most dispatch centers, however, are just starting to look at CQI planning strategies.

The Regional EMD training program and instructors advocate dispatchers interfacing with EMS agencies through developing ride-along programs for dispatchers and inclusion of dispatchers in internal CQI run reviews. The Regional Council has also encouraged trauma service's multidisciplinary trauma review committees to include emergency dispatchers when appropriate.

TABLE A

Communication Center Survey	Benton County Southeast Communication Center	Columbia County Columbia County Sheriff Depts	Franklin County Franklin County Sheriff Dept	Kittitas County Kitt Com	Walla Walla County Walla Walla County Dispatch	Yakima County Yakima Com Center Upper Valley	Yakima County Yakima FD #5 Dispatch
1. Citizen Access	Yes 9-1-1	Yes 9-1-1		Yes 9-1-1		Yes 9-1-1 answered by Yakima County PSAP and forwarded to this dispatch	Yes 9-1-1 answered by Yakima County PSAP and forwarded to this secondary PSAP
2. Consolidated	No	Only dispatch in Columbia County		Yes		Yes	8 agencies consolidated in this dispatch area, still 2 dispatch centers in Yakima Co.
3. # Employees	33	7		12		24	9
4. # Not Trained	0	0		1		1	0
5. Kinds of Training & how often	Yearly access, special operations and CBD/EMD as required	Monthly EMD and other dispatch related topics		Monthly EMD, Operator procedure, National fire dispatch, yearly access recertification		Monthly inhouse case reviews, weekly TTY, yearly EMD requirements	Weekly inhouse QA, monthly CE, annual TTY, Weather, TI/TII
6. On-going Training	Yes	Yes		Yes		Yes	Yes
7. Kinds of Protocols	King County CBD	King County CBD		Medical Priority		King County CBD	King County CBD
8. Med. Director involvement	Yes, EMS MPD review and approval	Yes, EMS MPD reviews and approves		Yes, EMS MPD		In the past, not currently	Yes, EMS MPD reviews EMD guidelines
9. Dispatch	CBD life threat,	In		In accordance		CBD life	CBD life

Prioritizing	emergent, non emergent	accordance with CBD		with Medical Priority		threat, property threat, no threat	threat, property threat, no threat
10. Bystander Care	Yes	Yes		Yes		Yes	Provided by Yakima 9-1-1 primary PSAP
11. Pre-arrival Instructions	Yes	Yes		Yes		Yes	Provided by Yakima 9-1-1 primary PSAP
12. Quality Assurance	In the process of developing	Yes		Yes		No	Yes

2. Strengths, Weakness and Cost

A strength of the Region's emergency dispatch centers is that all dispatch agencies have recognized the need for EMD training. Currently all emergency dispatch centers have trained personnel and utilize either the Region's established EMD Criteria Based Dispatch training program or other nationally recognized programs. A weakness of the emergency dispatch system is the high turn over of emergency dispatchers due to high stress and low pay. Dispatch centers find it necessary to send new hire dispatchers to EMD training about every six months.

A true weakness of the emergency dispatch system is the diverse terrain within the Region. Topography within the Region ranges from rugged heavily forested mountain wilderness, to fertile river valleys, to arid desert lowlands. Mountains border the Region to the north, east, and west. Many of these unique physical factors coupled with large rural areas create communication barriers in several locations. Areas in Columbia, Franklin and Yakima Counties have identified problems with radio communications. The following agencies have been identified with communication problems: Columbia County Ambulance, Franklin County PHD #1 Ambulances, Franklin County FD #2 Ambulance, Yakima County FD #5, Yakima FD #3, and Yakima FD #14.

The costs for improving the communication system are complicated and costly. Agencies in some areas, believe that new towers would improve EMS communications. Other agencies feel that new equipment is the answer. At the December 6, 2001, Regional Council meeting, the Regional Communication Committee was asked to investigate the continuing communication needs, possible solutions, and estimated costs for improving Regional communication systems in the event state or federal grants become available for these needs.

Another factor that be a barrier to the Regional and State Communication system is the fact that many emergency dispatch centers are under the supervision of law enforcement agencies. Often Emergency Medical Dispatch training and issues can be a low priority with law enforcement.

3. Geography and Demographics of the Area

The South Central Region, located in mid-eastern Washington State includes six counties: Kittitas, Yakima, Benton, Franklin, Walla Walla, and Columbia. These counties total 11,678 square miles of largely rural areas with four urban or suburban communities

located in the Cities of Yakima, Tri Cities (Richland, Kennewick, Pasco), Walla Walla, and Ellensburg. The Region's large rural areas contribute to long EMS response and transport times, a major problems identified in trauma system development.

South Central Region Distribution Areas

Total Land Area	Incorporated Area	Unincorporated Area
11,678 sq. miles	166.42 sq. miles	11,511.58 sq. miles
Total Population	Population in Incorporated Area	Population in Unincorporated Areas
487,500	311,0455	176,455
Total Population Density	Population Density in Incorporated Area	Population Density in Unincorporated Area
41.75	1,8690.32	15.3

Population Density per Square Mile per County

Benton County	Columbia County	Franklin County	Kittitas County	Walla Walla County	Yakima County
81.6	4.8	36.3	14.1	43.0	49.4

4. Goal

A Regional **goal** is to have EMD trained dispatchers. **Objective** is to have them on duty 24 hours a day. **Strategies** are to provide the EMD/CBD instructors at a local level and encourage dispatch centers to continue with EMD training.

An additional Regional **goal** and **objective** is for emergency dispatch centers to become participants in local and Regional CQI activities. The **strategy** has been to invite their participation at both the local and Regional level. To date dispatch centers have not all established internal CQI programs and are not yet motivated to participate at a local or Regional level.

The Region has always had a **goal** to improve trauma system communications. Previous trauma plans have identified geographical areas within the Region where "black holes" make radio and regular cell phone communications impossible. These areas often affect dispatch centers to ambulances and ambulances to hospitals communications. The **objectives** of "fixing" communication problems are very expensive and out of the range of either local or Regional EMS & trauma care councils. In some areas, multiple new communication towers, the land where they would be located, and improved communications equipment both in ambulances and at the hospitals would be necessary to improve EMS communications. All of the possible "fixes" would cost thousands of dollars. The Region however, does have a **strategy** for at least some of these areas, satellite cell phones. During a communication phase of trauma system development, DOH purchased several satellite cell phones. One set of phones was placed in the Columbia County Ambulance and at Dayton General Hospital in Columbia County. These phone have proved valuable tools in EMS communications. A distinct drawback

of this advanced technology is cost. Several areas where DOH placed satellite cell phones are electing to return them due to cost. The South Central Region and the Mid Columbia EMS & Trauma Care Councils have asked DOH for the excess satellite cell phones to be used in north Franklin County in pilot projects. A determining factor, as always, will be ongoing costs.

B. MEDICAL DIRECTION OF PRE-HOSPITAL PROVIDERS

1. Off-line and On-line Medical Direction

When EMS providers are able to be in direct contact with health care facilities through EMS radio or phone contact, “*on-line*” medical direction is available. Each MPD has delegated ED physicians in health care facilities to provide “on-line” medical direction to EMS providers in the field. MPDs also provide written protocols that specifically address how patient care is to be done when EMS providers are unable to be in direct contact with health care facilities. These protocols are “*off-line*” medical direction.

2. Current Status

DOH appoints a physician in each county to provide medical direction of prehospital personnel. These physicians are called MPDs. MPDs provide the legal authority for paramedics, EMTs including ILS, IV and Airway, and First Responders to administer patient care within their county or jurisdiction. MPDs develop written patient care protocols that describe and regulate the scope of practice and medical treatment for EMS. MPDs review, revise and update their protocols on a regular basis. WAC states that local MPD patient care protocols are not to be in conflict with Regional PCP’s. Regional PCPs are to be the foundation for MPD patient care protocols as well as for COPs. COPs are developed when a county determines that more direction is needed to specify how Regional PCPs will be used throughout their county.

Regional Medical Program Directors

Columbia County

Dr. Michael Luce, Dayton

Benton & Franklin Counties

Dr. Joe Loera, Kennewick

Kittitas County

Dr. Jack Horsley, Ellensburg

Walla Walla County

Dr. Adrian Selfa, Walla Walla

Yakima County

Dr. Eric Miller, Yakima

3. Strengths & Weaknesses

The MPDs themselves and their leadership for EMS are the strength of the medical direction of EMS within the South Central Region. They have developed County Operating Procedures (COPS) to assist in facilitating the Regional PCPs. The weakness of this system is that the MPDs do not often participate with the Region in development or update of the trauma plan or development or revision of Regional PCPs. In the past MPDs submitted monthly reports to the Regional Council and the Regional Council passed

through monthly grant funds. There was monthly contact with the MPDs. The MPDs now have minimal contact between the Region.

4. Goals, objectives, Strategies and Costs

Goal: MPD participation in Regional Council. **Objective:** encourage MPD participation in development of trauma plan and updates and input into Regional Patient Care Procedures.

Strategies: MPDs are included in all Regional Council mailings and receive minutes of all Regional Council meetings, subcommittee meetings, and drafts of all PCPs and trauma plan updates. **Costs:** The Regional Council no longer provides pass through grants to the Regional MPDs. The funds provided to the MPDs is stipends and does not reflect payment for the actual hours or pay they should receive. MPD stipends are now apart of the dedicated trauma care funds and are not as likely to experience budget cuts.

C. PRE-HOSPITAL EMS AND TRAUMA SERVICES

The care of emergency medical and trauma patients is greatly influenced by its large rural and wilderness areas. EMS response in the rural areas is provided by volunteer EMS agencies, which experience long response and transport times. The very wide-open spaces that make this region appealing to its residents can cost precious time during the "golden hour" for a severely injured trauma patient.

1. Current Status

The scope of trauma care offered by EMS providers and health care facilities within the Region covers a broad range of services and specialties. In the rural areas, EMS is provided by BLS agencies and trauma care is provided by small rural clinics or hospitals, all with limited resources and equipment. In the suburban areas, EMS is provided by ILS/ALS agencies and hospitals with a wider range of resources, including medical centers that offer sophisticated medical specialties and equipment. The most resources both EMS and trauma and medical care is provided in the four urban/suburban cities of Yakima, Walla Walla, Ellensburg, and the Tri Cities (Kennewick, Pasco, Richland).

The Regional Council fully realizes that long EMS response and transport times are a direct result of its vast rural and wilderness areas. This Trauma Plan has been developed with a goal to establish a three-tiered EMS system. EMS response is to be as follows: BLS First Responder Aid services followed by BLS ambulance response, followed by ILS/ALS ambulance response. ALS ambulances are to provide rendezvous and transport with the BLS and ILS aid services and ambulances as needed.

In earlier plans, six under served rural areas were targeted for establishment of first responder aid services. All are now in place. Local EMS & Trauma Care Councils have identified areas where BLS ambulance transport services are needed. They continue to actively exploring ways to develop these ambulances. The goal to increase levels of ambulance service levels in the cities of Prosser, Benton City, Cle Elum, Sunnyside, Patterson, and White Swan have been accomplished.

a. Verified Aid and Ambulance Services

Each local EMS & Trauma Care Council carefully evaluated existing EMS services, geographic location served, EMS response times, numbers of trauma calls, and possible future needs to determine minimum and maximum numbers and levels of EMS services when making recommendations to the Regional

Council. All local councils had areas where EMS agencies are striving to increase EMS skills and trauma verification levels. In the recommendation process, the Regional and local EMS & Trauma Care Councils identified specific geographic service areas using established and recognized fire district boundaries. It must be understood that the use of these boundaries does not mandate that the fire districts must deliver EMS care. The levels of EMS services recommended for these unserved and under-served areas are included in the minimum and maximum service recommendations. Barriers to establishing these EMS services include political climate, lack of human and financial resources, and low EMS call volume.

The Regional Council established a **goal** for tiered EMS response of BLS First Responder aid vehicles, BLS transport ambulances and ALS transport ambulances. The following description of EMS response areas by county describes current EMS services as well as areas of need. "Need" identifies the optimal EMS configuration for that specific geographical area. The Plan considers the mandate to avoid inefficient duplication and lack of coordination of trauma verified EMS services based on distribution and level of services. The following describes, county by county, the current EMS services and needs identified by local and Regional EMS & Trauma Care Councils.

FY 2001 EMS Personnel Resources by County and Level

Columbia County

Amb	Level	FAV	Level	FR	EMT	IV	AW	IV/AW	PM	Pd	Vol
2	BLS	2	BLS	6	31	0	1	1	0	1	38

Total Columbia County EMS Providers 39

Benton County

Amb	Level	FAV	Level	FR	EMT	IV	AW	IV/AW	PM	Pd	Vol
21	ALS								69		
13	BLS	12	BLS	113	309	31	0	0		250	272

Total Benton County EMS Providers 522

Franklin County

AM B	Level	FAV	Level	FR	EMT	IV	AW	IV/AW	PM	PD	Vol
3	ALS								10		
5	BLS	6	BLS	20	110	1	0	1		42	100

Total Franklin County EMS Providers 142

Kittitas County

Amb	Level	FAV	Level	FR	EMT	IV	AW	IV/AW	PM	Pd	Vol
5	ALS								12		
2	BLS	6	BLS	30	98	5	0	0		31	114

Total Kittitas County EMS Providers 145

Walla Walla County

Amb	Level	FAV	Level	FR	EMT	IV	AW	IV/AW	PM	Pd	Vol
5	ALS								22		
5	BLS	12	BLS	21	135	16	2	2		57	141

Total Walla Walla County EMS Providers 198

Yakima County

Amb	Level	FAV	Level	FR	EMT	IV	AW	IV/AW	PM	Pd	Vol
22	ALS								43		
4	ILS										
2	BLS	91	BLS	190	361	26		13		175	458

Total Yakima County EMS Providers 633

Total Regional EMS Providers 1,679

b. Prehospital and Hospital Training Resources

The Regional Council facilitates initial First Responder and EMT training and EMS continuing medical education (CME) and Ongoing Trauma Education Program (OTEP) through contracts with the local EMS and Trauma Care Councils. WAC requires all trauma verified EMS agencies have trauma training. Each local EMS & trauma council surveys their agencies for initial EMS, trauma training, and continuing medical educational needs. They submit training and education work plans, budgets and class schedules to the Regional Council that meet their training needs. The Regional Council Trauma Plan identifies areas where EMS services need to be established or levels of present EMS services should be increased. The local councils use these recommendations when scheduling classes.

Regional EMS ALS training and CME resources have been identified as Regional needs. A survey of ALS initial training needs demonstrated that the one “full time day class” paramedic course offered by Central Washington State College in Ellensburg, was not sufficient to meet ALS training needs. The Regional Council established a goal to assist in making ALS training more available and accessible within the Region. The Regional Council has worked with the local councils and Columbia Basin College in Pasco, to provide an additional paramedic program in a more central location with evening classes. The Regional Council provided financial support for the Commission on Accreditation of Allied Health Education Program (CAAHEP) on site certification survey for the CBC Paramedic Course.

c. Prioritizing and Conducting Prehospital Training

The Regional Council provides a state approved Regional OTEP that can be used by local councils in their training programs. Either the Regional OTEP program or other state approved trauma training programs have been incorporated into all Regional EMS training and education programs. The Regional OTEP and all other OTEP programs used within the Region provide all the required classes and training to meet EMS re-certification requirements.

d. Additional Public Safety Personnel

Affiliated EMS agencies provide vital emergency response link with EMS agencies. WAC defines an affiliated agency as an agency that is not required to be licensed, but recognized as a participant in Regional Trauma system. These agencies include ski patrols, dive rescue organizations, law enforcement, search and rescue organizations, and many others. Personnel from affiliated agencies must meet CME and OTEP requirements for personnel certification.

In the South Central Region, land search, and rescue responsibilities are under the jurisdiction of the county sheriff departments. These search and rescue services are offered in different makeup, dependent upon the geography of the particular county. Most notably, Yakima, Kittitas, and Columbia Counties have rescue teams that utilize snowmobiles, off road vehicles, and horses. In addition, Kittitas County has a rock rescue unit as part of their search and rescue agencies.

The sheriff departments in Yakima, Kittitas, and Columbia Counties provide water rescue in the South Central Region. Columbia Basin Dive Rescue provides water rescue in Benton and Franklin Counties. Specialized swift water rescue services are provided by Yakima County Fire District #5 and Walla Walla City County Fire Departments in their respective counties and in mutual aid or contractual relationships across county lines when it comes to these specific technical needs.

Hazardous Material Teams to assist in clean up and control of chemicals and other toxic materials sometimes encountered during EMS calls, are available in all counties. EMS personnel in Benton, Franklin, and Walla Walla Counties have received extensive training from the Umatilla Army Chemical Depot in Oregon, that stores a variety of poison gas, to provide specialized care incase of a chemical accident.

Affiliated agencies provide additional resources to EMS agencies. These agencies provide additional EMS personnel and often are on scene at their place of employment or in specialized areas or in specific locations prior to the arrival of regular EMS. The following are the Affiliated Agencies within the South Central Region:

Columbia County

Dayton Fire Department
Bluewood Ski Patrol

Kittitas County

Kittitas County Sheriff Search & Rescue
Roslyn Police Department
Senior EMT Instructors - Central Washington University
Kittitas County EMS Division

Mid Columbia

Benton County

Benton County Fire District #3

Benton County Sheriff
Washington Power Supply System
Columbia Basin Dive Rescue
Mid Columbia Pre-Hospital Care Association
Sr. EMT Instructors Benton County

Franklin County
Simplot

Walla Walla County
D&K Foods
Walla Walla County Sheriff
Walla Walla Police Department
Spout Springs Ski Patrol
Walla Walla Regional Airport
Washington State Patrol
Department of Natural Resources
Oregon Forest Service
Milton-Freewater Rural Rescue

Yakima County
Washington State Department of Ecology
Yakima Air Terminal
Department of Natural Resources
National Ski Patrol
Tieton Police Department
Yakima County Search and Rescue
Yakima Training Center Fire Department
Yakama Indian Agency
Yakima County EMS
Yakama Nation Branch of Forestry



AIR AMBULANCE SERVICES

The Regional Council recognized early in trauma system development that emergency medical helicopter ambulance scene response would greatly enhance EMS and trauma care within the Region. A centrally located emergency medical helicopter ambulance would help to reduce long response and transport times. Emergency medical helicopter ambulances from outside the Region currently respond when called. Emergency medical helicopter services located in Moses Lake, Spokane and Seattle have responded to EMS and trauma scenes within the Region. However, the benefit of quick response and transport times is diminished because of the length of time it often takes to respond to our Region. Helicopter air ambulances often are not utilized for long distance interfacility transport units because they are not pressurized.

An ALS interfacility transport fixed wing air ambulance service is currently available within the Region from the Pasco airport. Additional fixed wing air ambulance services also respond to the South Central Region from Seattle, Spokane, and Wenatchee. The Yakima Training Center provides a MAST helicopter that responds within the Region for wilderness emergency rescue. DOH is in the process of developing a statewide air ambulance plan.

Air Ambulance Resources

Critical Air Medicine provides ALS interfacility fixed wing air ambulance service located in Pasco within the South Central Region. This agency flies a Cessna 421 from Bergstrom Aviation at the Pasco Airport.

Northwest MedStar provides ALS on scene air ambulance helicopter service from Moses Lake in the North Central Region and fixed wing interfacility air ambulance service from Spokane in the East Region. Northwest MedStar flies EC 135 helicopters and King Air 200 Turbo Prop fixed wing aircraft.

Airlift Northwest provides ALS air ambulance helicopter scene response from the Seattle area and interfacility fixed wing air ambulance service from both Seattle in the Central Region and Wenatchee in the North Central Region. Airlift Northwest flies Augusta A 109 Mark II helicopters and Lear 35 A fixed wing air ambulances

South Central Region Helipads and Airports Utilized by Rotor-wing and Fixed Wing Air Ambulances

General facts concerning air ambulance response within the South Central Region:

- Air ambulance helicopters utilize both airports and hospital based helipads for patient transfer.
- Air ambulance helicopters when utilized for emergency scene response are able to land on roadways, fields etc.
- Helicopters and fixed wing aircraft also can be used to transport blood products and medical supplies to health care facilities.
- Fixed wing air ambulances generally can land on small airstrips but cannot land on gravel airstrips.
- The only Trauma Service that does not have a helipad or access to a local airport is Toppenish Providence Hospital, a Level IV Trauma Service. Patients from this facility are transported to Sunnyside Municipal Airport or Yakima Airport.
- Northwest MedStar has provided helicopter safety training to agencies within the South Central Region.

The Regional Council has identified the following helipads and airports within the Region. The following list also identifies “known” deficiencies noted by the air ambulance agencies utilizing the Regional airports. The

universal recommendation from air ambulance providers is to lengthen rural airstrips to 5,500 feet to accommodate newer aircrafts. However, lengthening airstrips may not be practical or feasible in many instances

Columbia County

A helipad is located at Dayton General Hospital, a Level V Trauma Service.

A helipad is located at Little Goose Dam on the Columbia River in North Columbia County.

Kittitas County

A roof helipad is under construction at Kittitas Valley Community Hospital, a Level IV Trauma Service, identifier number 82WA.

A helipad is located at Kittitas Public Hospital District #2 Clinic in Cle Elum, a Level V Trauma Service before its closure in 2001, identifier number S93.

Fixed wing air ambulances utilize Bowers Field in Ellensburg for interfacility patient transfers. There were no noted deficiencies other than airstrip length for Bowers Field.

There is an airport in Cle Elum, the Cle Elum Municipal Airport. There is no information provided concerning resources for deficiencies at this airport.

A state owned airstrip is located at Easton.

Benton/Franklin Counties

A helipad is located at Kennewick General Hospital, a joint designated Level III Trauma Service, identifier number 87WA.

A roof helipad is under construction at Kadlec Medical Center, a joint Level III Trauma Service, identifier number WA89.

A helipad is located at Lower Monumental Dam near the community of Kahlotus in northeast Franklin County.

Fixed wing air ambulances utilize the following airports:

Richland Airport in Richland has a noted deficiencies with a need for automated weather reporting and length of airstrip.

Vista Field in Kennewick has a noted deficiency for airstrip length.

Pasco International Airport in Pasco (PSC) has no noted deficiencies.

Prosser Memorial Hospital, a level IV trauma service has a helipad, identifier number 7WA6.

Prosser Airport in Prosser has noted deficiencies for automated weather reporting, Global Position Satellite (GPS) approach, and airstrip length. The Lear Jet used by one air ambulance agency cannot land at this airport because of the length of the airstrip.

Walla Walla County

A helipad is located at Walla Walla General Hospital, a Level III Trauma Service, identifier number WN06.

A helipad is located at St. Mary Medical Center, a Level II Trauma Service, identifier number 5WA3.

Fixed wing air ambulances utilize Walla Walla Regional Airport for interfacility patient transfers. No deficiencies are noted for this airport.

Yakima County

A helipad is located at Yakima Valley Memorial Hospital, identifier number 45WA. A roof helipad is under construction at Yakima Providence Medical Center, identifier number 99WA. These two hospitals are a joint Level III Trauma Service.

Air ambulances also utilize Yakima Air Terminal at McAllister Field with no deficiencies noted.

Fixed wing air ambulances utilize Sunnyside Municipal Airport for interfacility patient transfers. Deficiencies noted at this airport include automated weather reporting, Global Position Satellite (GPS) approach, Medium Intensity Runway Lights (MIRL) that are part of a Pilot Controlled Light (PCL) system, Precision Approach Path Indicator (PAPI), and airstrip length.

It should be noted that Toppenish Providence Hospital, a Level IV Trauma Service, has neither a helipad nor airport in their area. When air ambulance interfacility patients transfers are needed, the patients must be transported to Sunnyside Municipal Airport or Yakima Air Terminal.

The Tieton Airstrip, is a state owned airstip located in the Cascade Mountains in western Yakima County. Both helicopter and fixed wing air ambulance have used this airstrip for emergency patient transport.

Helicopter Safety Training

Proper helicopter safety training for EMS personnel is extremely important when emergency helicopter response is needed and requested. The South Central Region is fortunate that Northwest MedStar provides an outreach training program for Regional EMS agencies. In the last two

years, Helicopter Safety Classes have been provided for the following EMS agencies:

Columbia County

Columbia County FD #1 at Starbuck
Little Goose Dam, Starbuck

Kittitas County

Kittitas County FD #2, Ellensburg
Ellensburg Fire Department
Central Washington University Paramedic Class, Ellensburg
Cle Elum Fire Department
Kittitas County FD #7, Cle Elum
Kittitas County Search & Rescue
Kittitas County FD #3, Easton

Benton/Franklin Counties
Franklin County PHD #1, Connell
Franklin County FD #3 Pasco
Pasco Fire Department, Pasco
Hanford Fire Department, Richland
Benton County FD #6, Patterson
Lower Monumental Dam, Kahlotus
Benton PUD, Kennewick
Franklin PUD, Pasco
Benton County FD #1, Kennewick
Richland Fire Department, Richland
Kennewick Fire Department, Kennewick
Pasco Fire Department, Pasco
Benton County FD #4, West Richland
Franklin County FD #2, Kahlotus
Mid Columbia Prehospital Association, Pasco
Benton County FD #2, Benton City

Walla Walla County

Walla Walla County FD #4, Walla Walla
Walla Walla County FD #3, Eureka
Walla Walla County FD #7, Prescott
Walla Walla County FD #5, Burbank
Corps of Engineers, Walla Walla
Walla Walla Search & Rescue
Walla Walla County FD #8, Dixie

Yakima County

Yakima County FD #2, Selah
Sunnyside Fire Department, Sunnyside
Yakima FD #12, Tappico
Yakima FD #12, West Valley
Yakima FD #4, Moxee

Yakima County FD #14, Chinook Pass
 Yakima County FD #5, Toppenish
 Yakima County FD #3, Naches

2. Strengths and Weaknesses of EMS System

A true strength of the EMS & Trauma System is the willingness of all EMS agencies and all health care facilities to participate in the trauma system. EMS agencies have been established in areas where needs were identified. Other EMS agencies have increased skill levels to meet identified needs. All health care facilities have designated as trauma services.

The Region provides a strong system of CME and OTEP through the training programs established with the local EMS & trauma care councils.

The rural nature of the South Central Region creates the greatest barrier for recruiting additional personnel. Attrition and turnover of personnel are plagues in all rural volunteer EMS agencies. The Regional Council continues to encourage its EMS agencies in their recruitment efforts. Through the Regional EMS training and education contracts with the local EMS & Trauma Care Councils, the Regional Council facilitates initial EMS training and continuing medical education especially in remote rural areas.

3. Demographics:

South Central Region Population

Total Population	Male	Female
487,500	243,725	243,775

Population by Age and Gender

Age in Years	Total Population	Males	Females
0 – 14	116,842	57,693	59,149
15 – 24	65,978	36,041	29,937
25 – 44	138,315	70,929	67,386
45 – 64	100,855	50,564	50,291
65+	56,139	24,098	32,041
Totals	482,584	243,812 *	238,772*

*Note totals may not add up due to rounding.

Total Land Area	Incorporated Area	Unincorporated Area
11,678 sq. miles	166.42 sq. miles	11,511.58 sq. miles
Total Population	Population in Incorporated Area	Population in Unincorporated Areas
487,500	311,0455	176,455

Goals: The South Central Region's Trauma Plan's primary **goal** for EMS has been to establish a three-tiered EMS system. The **objective** and **strategies** are to provide training for new providers and existing providers in agencies targeted to increase levels of service. The Region provides the **deliverable** through prehospital training grants provides over \$75,000.00 per year to assist in EMS training to meet the Regional goals. Additional cost such as PALS and PHTLS are not included in these costs. EMS equipment and manpower for new or increased levels of services could also range in the thousands of dollars.

D. TRAUMA VERIFIED AGENCIES BY COUNTY

1. Current Status

Columbia County

Columbia County has 869 square miles and is classified as rural with large portions of wilderness.

Columbia County Ambulance, an all-volunteer, private non-profit BLS ambulance, provides service to the town of **Dayton** and all of Columbia County. This agency has two units and is the only ambulance service for Columbia County. ALS rendezvous is provided by Walla Walla City County ALS ambulance

Need: Due to the fact that *Columbia County Ambulance* is the only ambulance transport service within Columbia County, the Regional Council recommends an increase in EMS skill and trauma verification levels to either ILS* or ALS*. This recommended increase of levels for *Columbia County Ambulance* is reflected in the maximum of 1 ILS and/or 1 ALS ambulance service in Columbia County's maximum numbers of Transport Services.

Columbia County Fire District #1, an all-volunteer trauma verified BLS aid service with two units, provides service to the town of **Starbuck** and surrounding rural area in the northwestern portion of Columbia County. They provide a tiered EMS response with Columbia County BLS Ambulance.

Columbia County Fire District #3 provides volunteer trauma verified BLS aid service to the rural area north of Dayton with one unit. Dayton Fire Department, a licensed BLS aid service shares the same EMS personnel and responds with one unit. They both respond in a tiered system with Columbia County Ambulance from Dayton.

Need: For Dayton Fire Department licensed BLS aid service to become trauma verified to respond with Columbia County Ambulance in the City of Dayton.

Need: The Regional Council has identified the Tucannon Recreational Area, located in the eastern portion of Columbia County, as an area in need of a trauma verified BLS aid service to provide a tiered EMS response with Columbia County BLS Ambulance. Increased numbers and acuity of EMS calls is the justification for this recommendation. The Regional recommendation is reflected in the maximum number of BLS Aid Services for Columbia County.

Columbia County Search and Rescue, located in the town of Dayton, serves the rural area surrounding the town of Dayton with a volunteer licensed BLS aid service with one unit. They respond in a tiered EMS system with Columbia County Ambulance.

Benton County

Benton County has an area of 1,703 square miles, classified as rural suburban with urban areas located in the Cities of Richland and Kennewick.

Kennewick City Fire Department provides a paid trauma verified ALS ambulance service to the **City of Kennewick** and surrounding rural areas utilizing five units. They provide ALS rendezvous with Benton County Fire District #6 ILS ambulance.

American Medical Response (AMR), located in **Benton and Franklin Counties**, provides a private trauma verified service with paid staff and two units, specifically for ALS inter-city, interfacility, and out of the Region patient transports. They are not part of the 9-1-1 EMS response system. AMR has an agreement with Franklin County Fire District #2 BLS Ambulance to provide ALS ambulance rendezvous when requested. The Regional maximum ALS Transport Service recommendation reflects this ALS “Interfacility” transport agency.

Richland City Fire Department provides paid trauma verified ALS ambulance to the Cities of **Richland, West Richland** and surrounding rural areas, utilizing four units. They provide ALS rendezvous with Benton County Fire District #2 BLS ambulance from Benton City.

Dyncorp Hanford Industrial Ambulance provides a private/paid trauma verified ALS ambulance service on the **Hanford Nuclear Reservation** and its borders utilizing six units. They provide ALS rendezvous with the City of Richland Fire Department ALS Ambulances and Grant County Fire District # 8 BLS Ambulance from Mattawa.

Benton County Fire District #1 provides paid/volunteer trauma verified BLS aid service to the rural areas surrounding the City of **Kennewick**, utilizing seven units. They provide a tiered response with the City of Kennewick Fire Department ALS Ambulances.

Benton County Fire District #2 provides a volunteer trauma verified ILS ambulance service to the town of **Benton City** and the surrounding rural areas,

using two units. City of Richland Fire Department Ambulance and Prosser Memorial Hospital Ambulance provide ALS rendezvous from Prosser.

Needed: In the rural western portion of Benton County, defined by the *Benton County Fire District # 3* boundaries, both local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid service to provide a tiered EMS response with the ambulances that serve this area. This proposed service is reflected in the maximum number of Aid Services for Benton County.

Benton County Fire District #4 provides a volunteer trauma verified BLS aid service to the town of **West Richland** and surrounding rural areas, using three units. They provide a tiered EMS response with Richland City Fire Department ALS Ambulance and Benton County Fire District #2 BLS ambulance.

Needed: In the rural western portion of Benton County in the area defined by *Benton County Fire District # 5* boundaries, both local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid service to provide a tiered EMS response with the ambulances that serve this area. This proposed service is reflected in the maximum number of Aid Services for Benton County

Benton County Fire District #6 provides volunteer trauma verified ILS ambulance service to the community of **Paterson** and surrounding rural/wilderness area, with one ambulance and one First Responder Aid Vehicle. ALS rendezvous is provided by the City of Kennewick Fire Department Ambulance, Prosser Memorial Hospital ALS Ambulance, or ALS ambulances from the cities of Umatilla and Hermiston in Oregon. **Accomplishment:** In September 2000, Benton County Fire District #6 increased EMS skill levels from BLS to ILS trauma verified ambulance as identified as a need in earlier versions of the Regional Trauma Plan.

Columbia Crest Winery Ambulance is a private industry BLS ambulance, located at St. Michelle Winery near the community of Paterson. This service provides one licensed non-trauma verified ambulance and one First Responder Aid Vehicle, staffed by winery employees who also are volunteers for Benton Co. FD #6 ILS Ambulance. They provide a tiered EMS response with Benton County Fire District #6 ILS Ambulance and have transport capabilities.

Prosser Memorial Hospital Ambulance provides trauma verified ALS ambulance service to the towns of **Prosser and Grandview in Yakima County** and the surrounding rural area utilizing paid and volunteer staff with three units. They provide ALS rendezvous with Benton County Fire District #2 BLS Ambulance from Benton City, Benton County Fire District #6 ILS Ambulance from Paterson, and Klickitat Fire District #2 BLS Ambulance from Bickleton.

Need: Both the local and Regional Councils recommend a trauma verified BLS aid service for the town of Prosser and surrounding rural areas to provide a tiered EMS response with Prosser Memorial

Hospital Ambulance. This recommendation is reflected in the maximum number of BLS Aid Services for Benton County.

Franklin County

Franklin County has an area of 1,242 square miles, classified as rural and suburban with an urban area in the City of Pasco.

Franklin County Public Hospital District #1 provides a volunteer trauma verified BLS ambulance service to northern Franklin County to the communities of **Connell, Basin City, Mesa, Merrill's Corner** and surrounding rural areas, using five units. City of Pasco ALS ambulance provides rendezvous.

Need: The local and Regional EMS & Trauma Care Councils recommend that Franklin County Public Hospital District # 1 Ambulance increase EMS skills to include at least one ILS or ALS ambulance unit. Currently, ALS personnel are located at Connell and ILS personnel are located in Basin City and Merrill's Corner. If all of Franklin County PHD #1 increased levels to ILS ambulance, the increase is reflected in maximum recommendation of Transport Services for Franklin County.

Franklin County Fire District #2 provides a volunteer trauma verified BLS ambulance service to the rural town of **Kahlotus** and surrounding rural areas, with one ambulance and one aid vehicle. This service has long response and transport times. ALS rendezvous is provided by the City of Pasco Fire Department ALS Ambulance and/or through an agreement with AMR ALS Ambulance from Kennewick.

Need: The local and Regional EMS & Trauma Care Councils recommend that Franklin County Fire District #2 BLS ambulance increase EMS skill and trauma verification levels to ILS ambulance. This increase is reflected in the maximum recommendation of Transport Services for Franklin County.

Franklin County Fire District #3 provides volunteer trauma verified BLS aid service to the area surrounding the City of **Pasco**, utilizing six units. They provide a tiered EMS response with Pasco Fire Department ALS ambulance.

Need: The local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid services in the North Franklin County PHD #1 and Franklin County FD #2 areas. This increase is reflected in the minimum and maximum recommendations for Aid Services in Franklin County.

Pasco Fire Department provides a paid trauma verified ALS ambulance service to the City of **Pasco** and all of **Franklin County**, utilizing four units. They are the only ALS ambulance service in Franklin County and provide ALS rendezvous with Franklin County Public Hospital District #1 BLS Ambulances, Franklin

County Fire District #2 BLS Ambulance, and Walla Walla County Fire District #5 BLS ambulance.

American Medical Response (AMR) provides a private ALS ambulance service to **Benton and Franklin Counties, with paid staff and two units specifically for ALS inter-city, interfacility, and out of the Region patient transports. They are not part of the 9-1-1 EMS response system. They do have an agreement with Franklin County Fire District #2 BLS Ambulance to provide ALS ambulance rendezvous when requested. The Regional maximum ALS Transport Service recommendation reflects this ALS “Interfacility” transport agency.*

Kittitas County

Kittitas County has 2,297 square miles and is classified as rural with one suburban area, the City of Ellensburg. Most Kittitas County communities are located along the Interstate 90 Highway corridor that runs from east to west through the county. This busy Interstate can greatly impact EMS response due to the thousands of motor vehicles that travel this roadway each day. Another impact to Kittitas County’s EMS system is the large, year-round influx of non- resident recreational population.

Kittitas County Fire District #2, a volunteer/paid trauma verified BLS aid service for rural Kittitas County surrounding the City of Ellensburg, utilizing two units. They provides a tiered response with the Ellensburg Fire Department ALS Ambulance to Kittitas Co. Fire District #2 service area and surrounding state highways and Interstate 90.

*Ellensburg Fire Department ALS Ambulance is a paid/volunteer department that provides service in the **City of Ellensburg** and surrounding rural areas of Kittitas Public Hospital District #1, utilizing three units. They provide a tiered response with the Kittitas Fire Department, Kittitas County Fire District #2 and Kittitas Fire District #4 BLS aid services.*

*Kittitas Fire Department, all volunteer trauma verified BLS aid services provides response in the **City of Kittitas** utilizing one unit. They provide a tiered response with the Ellensburg Fire Department ALS Ambulance to their service area, sections of Kittitas Co. FD #2, Interstate 82, and Interstate 90.*

Need: In the rural City of Kittitas the local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS ambulance service. City of Ellensburg ALS ambulance encounters long response and transport times to this area. This BLS ambulance would be able to provide rendezvous with the ALS ambulance.

Need: In the rural Community of Thorp, local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid service. This agency’s service area is defined by Kittitas Co. FD #1’s service area. They would provide tiered response with the Ellensburg Fire Department ALS Ambulance. The Regional numbers for maximum BLS Aid Services in Kittitas County reflect this proposed service.

Kittitas County Fire District #4, in the Community of **Vantage**, provides a volunteer trauma verified BLS aid service with one unit. They provide a tiered response with the Ellensburg Fire Department ALS Ambulance and mutual aid upon request with Grant County Fire District # 8 BLS Ambulance from Mattawa.

Need: The Regional maximum numbers of trauma verified BLS aid services for Kittitas County reflects trauma verification of this service.

Kittitas County Public Hospital District #2 provides a paid ALS ambulance service to the town of **Cle Elum** and surrounding rural/wilderness areas of Kittitas Hospital District #2, utilizing one ALS ambulance and one BLS ambulance. They provide tiered response with Cle Elum Fire Department, Kittitas County Fire District #3, and Kittitas County Fire District #8 aid services. They also provide ALS tiered response with Roslyn Fire Department BLS Ambulance.

Cle Elum Fire Department provides volunteer trauma verified BLS aid/ambulance service to the City of Cle Elum, utilizing one ambulance and two aid units. They respond in a tiered response with Kittitas PHD #2 ALS Ambulance. They provide mutual aid response to South Cle Elum, and other surrounding areas of Kittitas County Public Hospital District #2 when requested.

Need: The local and Regional EMS & Trauma Care Councils recommend that a trauma verified BLS aid service be established in the Community of South Cle Elum to provide a tiered response with Cle Elum Fire Department BLS and Kittitas County PHD #2 ALS ambulances. EMS response to South Cle Elum can be delayed due to access barriers of increased railroad traffic and the natural barrier of the Yakima River. The Regional maximum number of BLS aid services for Kittitas County reflects this proposed service.

Roslyn Fire Department provides volunteer trauma verified BLS ambulance to the Town of **Roslyn** utilizing one ambulance. Kittitas PHD #2 ALS Ambulance provides tiered ALS response from Cle Elum.

Need: The Regional maximum numbers of trauma verified BLS Ambulance Services for Kittitas County reflects trauma verification of this service.

Kittitas County Fire District #3 in the community of **Easton** and surrounding rural/wilderness areas provides volunteer trauma verified BLS aid service utilizing one unit. They provide tiered response with Kittitas County PHD #2 ALS ambulance to their service area and additional sections of Interstate 90.

Need: Local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid service at Lake Cle Elum in the area designated by Kittitas Co. FD #6. This service would provide a tiered response with Kittitas PHD #2 ALS Ambulance. The Regional

maximum numbers of BLS aid service in Kittitas County reflect this proposed service.

Need: Local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid service in the Teanaway area defined by Kittitas Co. FD #7's service area. This service would provide tiered response with Kittitas County PHD #2 ALS Ambulance. The Regional maximum number of trauma verified BLS aid services reflects this proposed service.

Kittitas County Fire District #8, a volunteer trauma verified BLS aid service, provides response to the Community of **Lake Kachess** and surrounding rural/wilderness area, utilizing one unit. They provide a tiered response with Kittitas County PHD #2 ALS Ambulance to their service area, the recreational areas of Lake Kachess and sections of Interstate 90.

King County Fire District #51, located on the summit of **Snoqualmie Pass**, provides volunteer trauma verified BLS aid service with two units. They provide initial response two miles into Kittitas County per mutual aid agreements and provide mutual aid by request with Kittitas PHD #2 ALS Ambulance and the North Bend Ambulance from King County.

Walla Walla County

Walla Walla County, 1,270 square miles, is classified as rural with one suburban/urban center in the City of Walla Walla.

Walla Walla City County Ambulance Service provides a trauma verified ALS ambulance service for the City of **Walla Walla** and all of **Walla Walla County**, utilizing paid staff and 5 units. They provide ALS ambulance rendezvous with Waitsburg BLS ambulance, Walla Walla Fire District #5 BLS ambulance, Columbia County BLS Ambulance and Milton Freewater Rural Rescue BLS Ambulance from Oregon.

College Place Fire Department provides a volunteer trauma verified BLS aid service for the town of **College Place** and surrounding rural area, with three units. They provide a tiered response with ALS Walla Walla City County Ambulance .

Walla Walla County Fire District #1 provides a trauma verified BLS aid service for the community of **Clyde** and surrounding rural area, utilizing volunteers and one unit. They provide a tiered EMS response with Walla Walla City County ALS Ambulance and Walla Walla Fire District #5 BLS Ambulance .

Waitsburg Ambulance provides a private non-profit trauma verified BLS ambulance service for the town of **Waitsburg** and surrounding rural areas, defined by Walla Walla County Fire District #2 boundaries. They utilize volunteers and two units. ALS rendezvous is provided by Walla Walla City County Ambulance.

Need: In Walla Walla County in the defined boundary of Walla Walla Fire District #2, the local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid service to respond in a tiered EMS system with Waitsburg BLS Ambulance and Walla Walla City County ALS Ambulance. This recommendation is reflected in the Regional maximum recommendation for BLS Aid Services in Walla Walla County.

Walla Walla County Fire District #3 provides a volunteer trauma verified BLS aid service to the community of **Eureka** and surrounding rural areas, utilizing one unit. They provide a tiered EMS response with Walla Walla City County ALS Ambulance.

Walla Walla County Fire District #4 provides a volunteer trauma verified BLS ambulance in the City of **Walla Walla** and the surrounding rural areas. They have an ambulance unit and four-wheel vehicles utilized as aid units. They provide a tiered/backup EMS response with Walla Walla City County ALS Ambulance. * Even though WWCDFD #4 is licensed and verified as a BLS ambulance, they frequently respond only as a BLS aid vehicle. The maximum number of “BLS Aid” reflects this agency when it responds as an Aid Services.

Walla Walla County Fire District #5 provides a trauma verified BLS ambulance service in western **Walla Walla County** and in the community of **Burbank** and surrounding rural area, utilizing volunteer staff and two units. Pasco Fire Department ALS Ambulance or Walla Walla City County ALS Ambulance provides ALS ambulance rendezvous depending on the location of the incident. This service is closer to the Tri-Cities, therefore, the majority of patients are transported to the Tri Cities Trauma Service facilities.

Need: In Walla Walla County FD #5, the local and Regional EMS & Trauma Care Councils recommend increasing EMS levels to a trauma verified ILS ambulance to respond in a tiered EMS system with ALS ambulances from Pasco and the City of Walla Walla. This recommendation is reflected in the Regional maximum recommendation for ILS Ambulance Services in Walla Walla County.

Walla Walla County Fire District #6 provides a volunteer trauma verified BLS aid service to the communities of **Touchet and Lowden** and surrounding rural areas, utilizing one unit. They provide a tiered EMS response with Walla Walla Fire District #5 BLS Ambulance and Walla Walla City County ALS Ambulance.

Walla Walla County Fire District #7 provides a volunteer trauma verified BLS aid service to the community of **Prescott** and surrounding rural area, with two units. They provide a tiered EMS response with Waitsburg BLS Ambulance and Walla Walla City County ALS Ambulance.

Walla Walla County Fire District #8 provides a volunteer trauma verified BLS aid service to the community of **Dixie** and surrounding rural areas, utilizing two

units. They respond in a tiered EMS response with Walla Walla City County ALS Ambulance.

Yakima County

Yakima is the largest county in the Region with 4,296 square miles. It is classified as wilderness, rural, suburban, and urban, the City of Yakima.

Tieton Fire Department provides volunteer trauma verified BLS aid service to the town of **Tieton** and surrounding rural/wilderness areas utilizing two units. They provide a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Yakima County Fire District # 1 provides volunteer trauma verified BLS aid service to the community of **Cowiche** and surrounding rural/wilderness areas, utilizing two units. This service experiences long response and transport time. They provide a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Need: The local and Regional EMS & Trauma Care Councils recommend that Yakima County Fire District # 1 increase skill and trauma verification levels to BLS Ambulance Service to provide rendezvous with ALS ambulances from the City of Yakima. This recommendation is reflected in the maximum recommendation for BLS Ambulance Services for Yakima County.

Yakima County Fire District #2 provides a volunteer trauma verified BLS aid service to the town of **Selah**, surrounding rural/wilderness areas of Yakima River Canyon, the Wenas Valley, the Lt. Murray Recreational Area and a portion of Interstate-82 between Yakima and Ellensburg, using six units. They provide a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Yakima County Fire District #3 provides a volunteer trauma verified BLS aid service to the town of **Naches** and the surrounding rural areas including State Route 12 and the White Pass Highway, utilizing three units. Both ALS ambulance response and transport times from this agencies service areas exceed 30 minutes. They provide a tiered EMS response with the 2 ALS ambulance services from the City of Yakima.

Need: The local and Regional EMS & Trauma Care Councils recommend that Yakima County Fire District # 3 increase skill and trauma verification levels to BLS Ambulance Service to provide rendezvous with ALS ambulances from the City of Yakima. This recommendation is reflected in the maximum recommendation for BLS Ambulance Services for Yakima County.

Yakima County Fire District #4 provides a volunteer trauma verified BLS aid service to the communities of **Terrace Heights** and **Moxee** and surrounding rural

areas, utilizing three units. They provide a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Yakima Fire District #5 provides a volunteer/paid trauma verified BLS aid service to **700** square miles of the Lower Yakima Valley and the Yakama Indian Reservation. This agency shares personnel and EMS units with six cities. They provide ten additional stations and utilize twenty-eight units.

Station #1, **White Swan**; Station # 2, **Brownstown**; and Station #3, **Harrah**, provide a tiered response with ILS White Swan Ambulance and ALS ambulances from Toppenish and the City of Yakima.

(^ Indicates shared personnel and EMS units with city fire departments. The city fire departments respond within their city limits and Yakima Fire District # 5 responds to surrounding rural areas.)

Station # 4, **Gamache**; Station # 5, **Parker**; ^Station # 6, **Wapato**; Station # 7, **Sawyer**; Station # 8, **Buena**; ^Station # 9, **Toppenish**; and ^Station #10, **Zillah**; ^Station # 11, **Granger**; and Station # 16, **Satus** provide tiered EMS response with the ALS ambulances from Toppenish and the City of Yakima.

Station # 12, **Outlook** and ^Station #13, **Sunnyside** provides tiered EMS response with **ALS** Sunnyside Ambulance.

^Station # 14, **Grandview** and ^Station # 15, **Mabton**; provide tiered EMS response with Prosser Memorial Hospital ALS Ambulance from the City of Prosser in Benton County and Sunnyside Fire Department ALS Ambulance.

To be able to provide adequate EMS volunteer staff to this large service area the following stations respond jointly:

1. Station # 1, **White Swan**; Station # 2, **Brownstown**; and Station # 3, **Harrah**;
2. Station # 7, **Sawyer**; and Station # 8, **Buena**
3. Station # 16, **Satus**; Station # 11, **Granger**; and Station # 9, **Toppenish**.

Need: The local and Regional EMS & Trauma Care Councils recommend that Yakima County Fire District #5 BLS aid service increase skill levels to include at least one ILS aid unit. If all of Yakima Fire District #5 increased levels to ILS, the minimum maximum numbers for trauma verified aid service is reflected in the recommendation for Yakima County.

Need: The local and Regional EMS & Trauma Care Councils recommend that Yakima County Fire District # 5 shared stations in Zillah, Toppenish, Wapato, and Mabton increase skill and trauma verification levels to BLS Ambulance Service to provide rendezvous with ALS ambulances. Many locations within Yakima Fire District #5 service area have long response and transport times. This recommendation is reflected in the maximum recommendation for BLS Ambulance Services for Yakima County.

Yakima County Fire District #6 provides a volunteer trauma verified BLS aid service to the community of **Gleed** and surrounding rural area, utilizing two units. They provide a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Need: Both local and Regional EMS & Trauma Care Councils recommend a trauma verified BLS aid service for the rural area in Yakima County area between the towns of Mabton and Bickleton as defined in the boundaries of *Yakima County Fire District # 7*. This service would provide a tiered EMS response with the ambulance services from Bickleton, Sunnyside, Prosser and Toppenish. The maximum number of BLS Aid Services for Yakima County reflects this recommendation.

Yakima County Fire District #9 provides a volunteer trauma verified BLS aid service to the community of **Naches Heights** and surrounding rural area, utilizing four units. They provide a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Yakima County Fire District #12 provides a paid/volunteer trauma verified BLS aid service to the communities of **West Valley** and **Tampico** and surrounding rural/wilderness areas, utilizing five units. This service has long response times and long ambulance response and transport times often exceed 30 minutes. They provide a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Need: The local and Regional EMS & Trauma Care Councils recommend that Yakima County Fire District # 12 increase skill and trauma verification levels to BLS Ambulance Service to provide rendezvous with ALS ambulances from the City of Yakima. This recommendation is reflected in the maximum recommendation for BLS Ambulance Services for Yakima County.

Yakima County Fire District #14 provides a volunteer trauma verified BLS aid service to the communities of **Nile Valley, Clifffdale**, Highway 410, Chinook Pass, and surrounding rural/wilderness areas, utilizing one unit. This service has long response times and ambulance response to this area often exceeds 30 minutes. In addition this area experiences a large influx of non-resident year-round recreational population. Yakima Fire District #14 provides a tiered EMS response with the two ALS ambulance services from the City of Yakima.

Need: The local and Regional EMS & Trauma Care Councils recommend that Yakima County Fire District #14 in Nile/Clifffdale area increase EMS skill and trauma verification levels to a minimum of BLS ambulance service and preferably, ILS ambulance service. They would rendezvous with the ALS ambulances from the City of Yakima. This recommended increase is reflected in both the BLS maximum Ambulance Services and the maximum ILS Ambulance Services recommendation for Yakima County.

Yakima City Fire Department provides a paid/volunteer trauma verified BLS aid service to the City of **Yakima**, classified as urban/suburban, with ten units. They provide a tiered EMS response with the two ALS ambulance services located in the City of Yakima.

In the City of **Yakima** and surrounding suburban, rural` and wilderness areas, trauma verified ALS ambulance service is provided by two ambulance services.

American Medical Response, a private ambulance service, has three ALS units stationed in the City of Yakima, one ALS unit stationed in the City of Union Gap and one unit stationed in the City of Toppenish. AMR provides ALS ambulance response in a tiered EMS system with Fire Districts # 1, 2, 3, 4, 6, 9, 12, 14, Union Gap Fire Department, and the City of Yakima aid services. From their Toppenish station they provide a tiered EMS response with aid services from Yakima Fire District #5, Toppenish Fire Department, Wapato Fire Department, and Zillah Fire & Rescue.

Advanced Life Systems, a private ambulance service with four units stationed in the City of Yakima, provides ALS ambulance response to the City of Yakima and tiered responses with Fire Districts # 1, #2, #3, #4, #6, #9, #12, #14, Union Gap Fire Department, and the City of Yakima aid services.

Union Gap Fire Department provides trauma verified BLS aid service in the urban/suburban City of **Union Gap** and surrounding rural area, utilizing paid/volunteer staff and four units. They provide a tiered EMS response with the two ALS ambulance services from City of Yakima.

Zillah City Fire & Rescue provides trauma verified BLS aid service to the town of Zillah and surrounding rural areas, utilizing volunteers and three units. They provide a tiered EMS response with the ALS Ambulances from Toppenish and the City of Yakima and Sunnyside Fire Department ALS Ambulance.

White Swan Ambulance provides a tribally owned trauma verified ILS ambulance service to the community of **White Swan** and surrounding rural/wilderness areas on the Yakama Reservation, utilizing volunteers and three units. ALS ambulance rendezvous is provided by ambulances from Toppenish and the City of Yakima

Wapato Fire Department provides a trauma verified BLS aid service to the town of **Wapato** and surrounding rural areas, with volunteer with two units. They provide a tiered EMS response with ALS ambulance services from Toppenish and the City of Yakima.

Toppenish Fire Department provides a trauma verified BLS aid service to the town of **Toppenish** and surrounding rural areas, with volunteer and two units. They provide a tiered EMS response with the ALS ambulance from Toppenish and the City of Yakima.

Granger Fire Department provides a trauma verified BLS aid service to the town of **Granger** and surrounding rural areas, with volunteers and two units. They provide a tiered EMS response with the Toppenish and Sunnyside ALS ambulances.

Sunnyside Fire Department provides a paid/volunteer trauma verified ALS ambulance service to the city of **Sunnyside** and surrounding rural areas, utilizing three units. They provide ALS rendezvous for BLS ambulances from Grant County Fire District #10 in Mattawa and Klickitat County Fire District #2 in Bickleton.

Mabton Fire Department provides a volunteer trauma verified BLS aid service to the town of **Mabton** and surrounding rural areas, with two units. They provide a tiered EMS response with Sunnyside Fire Department ALS Ambulance and Prosser Memorial ALS Ambulance.

Grandview Fire Department provides a trauma verified BLS aid service to the town of **Grandview** and surrounding rural areas, utilizing volunteers with two units. They provide a tiered EMS response with Sunnyside Fire Department and Prosser Memorial Hospital Ambulance ALS services.

Prosser Memorial Hospital Ambulance in the City of **Prosser**, located in Benton County, provides trauma verified ALS ambulance tiered response with aid services from Grandview and Mabton Fire Departments. They also provide ALS rendezvous with Klickitat Fire District #2 BLS Ambulance from Bickleton.

Klickitat County Fire District #2, provides volunteer trauma verified BLS ambulance service to the community of **Bickleton** and surrounding remote wilderness areas of northern Klickitat County, utilizing two units. This is an “out of Region EMS agency” that routinely transports patients to South Central Region trauma services in Sunnyside and Prosser. Benton County Fire District #6 ILS Ambulance provides rendezvous from Paterson, Prosser Memorial Hospital ALS Ambulance and Sunnyside Fire Department ALS Ambulance

Grant County Fire District #8 provides a volunteer trauma verified BLS ambulances service to the rural communities of **Mattawa** and **Desert Aire** and surrounding rural/wilderness areas of southern Grant County, utilizing two units. This is an additional “out of the Region EMS agency” that routinely transport patients to South Central Region trauma services in Yakima, Sunnyside, and Richland. ALS ambulance rendezvous is provided by ALS ambulances from the City of Yakima, Dyncorp Hanford Industrial Ambulance, Richland Fire Department, or Sunnyside Fire Department.

Each local EMS & trauma care councils has provided county maps showing EMS service boundaries. The Regional Council found that when maps were reduced to be included in this trauma plans, detail was lost and the maps became meaningless. Maps are available in the Regional Council office for review.

2. Strengths & Weaknesses

Strength of the South Central Region trauma system is its functional EMS needs and distribution process. This process assists both the local and Regional EMS & Trauma Care Councils and the Department of Health to meet the legislative mandate of a trauma system that avoids inefficient duplication of EMS services. The EMS system in the South Central Region is multifaceted. It is based on a network of Basic Life Support (BLS) EMS First Responder Aid Vehicle Agencies supported by BLS Ambulance in the rural/wilderness areas supported by Advanced Life Support (ALS) EMS Ambulance Agencies located in the suburban/urban areas of the Region.

Additional strengths are the numbers and locations of Regional ALS ambulance agencies. The Region has maximum numbers of ALS trauma verified agencies recommended in this trauma plan in all locations with the exception of Columbia County. These ALS agencies have a full compliment of paid paramedic staff employed by a combination of private and public providers.

Another strength of the Regional EMS system is the dedicated EMS volunteers that man BLS First Responder Aid Vehicle Agencies and rural BLS Ambulance Agencies. These dedicated volunteers provide countless hours of both response time and many hours of training and continuing medical education (CME) to maintain their certification requirements.

A true *weakness* of the Regional EMS system is the economics and low population bases in the rural areas limit volunteer recruitment. In many rural communities, there are just not enough people to volunteer as EMS personnel. In these areas such as Columbia County, the EMS personnel do the very best with what they have to help their neighbors in the true spirit of rural American.

3. Demographics

South Central Region Distribution Areas

Total Land Area	Incorporated Area	Unincorporated Area
11,678 sq. miles	166.42 sq. miles	11,511.58 sq. miles
Total Population	Population in Incorporated Area	Population in Unincorporated Areas
487,500	311,0455	176,455
Total Population Density	Population Density in Incorporated Area	Population Density in Unincorporated Area
41.75	1,8690.32	15.3

Population Density per Square Mile per County

Benton County	Columbia County	Franklin County	Kittitas County	Walla Walla County	Yakima County
81.6	4.8	36.3	14.1	43.0	49.4

South Central Region Total Licensed Vehicles and Licensed Drivers

County	Licensed Drivers	Passenger Vehicles	Trucks
Benton	101,543	83,506	33,178
Columbia	3,208	2,309	2,137
Franklin	30,176	27,301	14,591
Kittitas	23,763	16,595	10,983
Walla Walla	34,996	25,158	11,623
Yakima	143,255	120,977	58,815
Totals	336,941	275,846	131,330

4. Goals: The South Central Region's Trauma Plan's **goal** has long been to establish a three-tiered EMS system. EMS response is to be as follows: BLS First Responder Aid services followed by BLS ambulance response, followed by ILS/ALS ambulance response. ALS ambulances are to provide rendezvous and transport with the BLS and ILS aid services and ambulances as needed. The **objective** is to have the "needs" identified above fulfilled. The **strategies** are listed in the table below. Projected costs to improve the *overall* Prehospital EMS & Trauma Services would in the millions of dollars. One level III trauma service estimated a half to two million dollars to move to a level II designation. EMS equipment and manpower for new or improved EMS services could also range in the millions of dollars.

GOAL	STRATEGIES/PROGRESS
South Central Region Need	
An emergency medical helicopter service based within the Region	Tri City Herald reports that an Air Ambulance Service is planning to establish an emergency medical helicopter service based in the Tri Cities area. Barriers to emergency medical helicopter services has been high cost and low patient volumes
Benton County	
Trauma Verified Aid Service in the city of Prosser to assist Prosser Memorial Hospital ALS Ambulance	Prosser Fire Department is working toward this goal.
Trauma Verified Aid Service in the areas defined by Benton County Fire District #5 and Benton	Low population base and limited financial resources in this area are

County Fire District #3	barriers to progress
Columbia County	
Increase trauma verified ambulance service levels to ILS or ALS for Columbia County Ambulance in the town of Dayton	This agency is working toward this goal, however, low population base and financial resources hamper recruitment attempts.
Dayton Fire Department to become a Trauma Verified Aid Services to respond in the City of Dayton and an additional Trauma Verified Aid Service to respond to the Tuccannon wilderness area with Columbia County Ambulance.	Recruitment attempts are hampered by low population base and financial resources
Franklin County	
Trauma Verified Aid Services to respond with North Franklin Hospital District #1 Ambulances	There are no fire protection districts in this area of North Franklin County, thus limiting potential EMS personnel and financial resources
Increase EMS levels to at least one ILS/ALS ambulances in North Franklin Hospital District #1 Ambulances in Mesa, Basin City, Merrill's Corner, and Connell.	Agency is working toward this goal. ILS training has been provided
Increase trauma verification level to ILS ambulance in Franklin County Fire District #2 in Kahlotus.	Low population base and financial resources are a barrier to this goal
Kittitas County	
Trauma Verified Aid Services for Kittitas County Fire District #1, #6, #7, and South Cle Elum Fire Department.	Recruitment attempts are hampered by economics and low population base
Increase from BLS Trauma Verified Aid Service to Trauma Verified BLS Ambulance Service for Kittitas Fire Department in the City of Kittitas	Agency is working toward this goal

Walla Walla County	
Increase level to ILS ambulance in Walla Walla County Fire District #5 in the town of Burbank.	Agency is working toward this goal
Establish a BLS trauma verified aid service in the defined boundary of Walla Walla Fire District #2, to respond in a tiered EMS system with Waitsburg BLS Ambulance and Walla Walla City County ALS Ambulance.	Walla Walla County is working toward this goal, however, recruitment attempts are hampered by economics and low population base.
Increase EMS personnel in Walla Walla County Fire District # 1, #3, and #7.	Recruitment attempts are hampered by economics and low population base.
Yakima County	
Increase EMS levels from Trauma Verified Aid Service to Trauma Verified BLS Ambulances in Yakima Fire District #1, #3, #5, #12, and #14	Agencies are working toward this goal
Increase EMS levels to include at least one ILS Aid Service within Yakima County FD #5	Agency is working toward this goal
Trauma Verified Aid Service in the area identified by the boundaries of Yakima Co. Fire District #7	Recruitment attempts are hampered by economics and low population base

**Table B: Recommended Minimum and Maximum Numbers
for EMS Verified Trauma Services**

Columbia County

SERVICES	MINIMUM NUMBER		MAXIMUM NUMBER		CURRENT STATUS	Check if No Change
	Approved	Recommended	Approved	Recommended		
Aid –BLS	2	2	3	4	2	
Aid - ILS	0	0	0	0	0	x
Aid - ALS	0	0	0	0	0	x
Amb - BLS	1	1*	1	1*	1	x

Amb - ILS	0	0	0	1*	0	x
Amb - ALS	0	0	0	1*	0	x

The Regional Council recommends an increase in EMS skill and trauma verification levels to either ILS or ALS ambulance for Columbia County Ambulance. If Columbia County Ambulance moves to either ILS or ALS, the minimum and maximum numbers for BLS ambulance would change to 0.

Benton County

SERVICES	MINIMUM NUMBER		MAXIMUM NUMBER		CURRENT STATUS	Check if No Change
	Approved	Recommended	Approved	Recommended		
Aid -BLS	4	4	4	4	2	x
Aid - ILS	0	0	0	0	0	x
Aid - ALS	0	0	0	0	0	x
Amb - BLS	2	0	2	0	0	
Amb - ILS	0	2	2	2	2	
Amb - ALS	4	4	4	5*	5	x

American Medical Response* (AMR) provides a private ALS ambulance service to **Benton and Franklin Counties, with paid staff and two units specifically for ALS inter-city, interfacility and out of region trauma verified ambulance. They are not part of the 9-1-1 EMS response system. They do have an agreement with Franklin County Fire District #2 BLS Ambulance to provide ALS ambulance rendezvous when requested. The Regional maximum ALS Transport Service recommendation reflects this ALS “Interfacility” transport agency.

Franklin County

SERVICES	MINIMUM NUMBER		MAXIMUM NUMBER		CURRENT STATUS	Check if No Change
	Approved	Recommended	Approved	Recommended		
Aid -BLS	1	1	3	3	1	x
Aid - ILS	0	0	0	0	0	x
Aid - ALS	0	0	0	0	0	x
Amb - BLS	2	2*	2	2*	2	x

Amb - ILS	0	0	2	2*	0	x
Amb - ALS	2	2**	2	2**	2	x

*Franklin County Fire District #2 are recommended to become ILS ambulance services. Franklin County PHD #1 is recommended to increase to at least one ILS/ALS ambulance. If Franklin County FD #2 or all of Franklin County PHD #1 increase to ILS ambulance, the recommended minimum numbers for BLS ambulances would decrease accordingly.

***American Medical Response* (AMR) provides a private ALS ambulance service to **Benton and Franklin Counties**, with paid staff and two units specifically for ALS inter-city, interfacility, and out of the Region patient transports. They are not part of the 9-1-1 EMS response system. They do have an agreement with Franklin County Fire District #2 BLS Ambulance to provide ALS ambulance rendezvous when requested. The Regional minimum and maximum ALS Transport Service recommendation reflects this ALS “Interfacility” transport agency.

Kittitas County

SERVICES	MINIMUM NUMBER		MAXIMUM NUMBER		CURRENT STATUS	Check if No Change
	Approved	Recommended	Approved	Recommended		
Aid –BLS	5	5	10	10	5	x
Aid – ILS	0	0	0	0	0	x
Aid – ALS	0	0	0	0	0	x
Amb - BLS	1	1	2	3	2	
Amb - ILS	0	0	0	0	0	x
Amb - ALS	2	2	2	2	2	x

Walla Walla County

SERVICES	MINIMUM NUMBER		MAXIMUM NUMBER		CURRENT STATUS	Check if No Change
	Approved	Recommended	Approved	Recommended		
Aid -BLS	8	7*	7	7*	6	
Aid - ILS	0	0	0	0	0	x
Aid - ALS	0	0	0	0	0	x
Total Aid		7		7	7	

Amb - BLS	2	3**	2	3**	3	
Amb - ILS	0	0	1	1**	0	x
Amb - ALS	1	1	1	1	1	x

*A BLS trauma verified aid service in the area identified by Walla Walla County FD #2 boundaries is identified as a need and is reflected in the minimum and maximum numbers.

** Walla Walla County Fire District #5 Trauma Verified BLS Ambulance has long been recommended to increase their level of service to trauma verified ILS ambulance. If they should move to ILS ambulance, the recommended minimum and maximum numbers for BLS ambulance would change to 2.

Yakima County

SERVICES	MINIMUM NUMBER		MAXIMUM NUMBER		CURRENT STATUS	Check if No Change
	Approved	Recommended	Approved	Recommended		
Aid –BLS	18	18	20	20*	18	x
Aid – ILS	0	0	0	1**	0	x
Aid – ALS	0	0	0	0	0	x
Amb - BLS	2	1	9	8	0	
Amb – ILS	0	1	1	1	1	
Amb - ALS	3	3	3	3	3	x

* A BLS trauma verified aid service, in the area identified by the boundaries of Yakima Co. Fire District #7, is identified as a need and is reflected in the minimum and maximum numbers.

**Yakima County Fire District #5 BLS aid service is recommended to increase skill levels to include at least one ILS aid unit. If all of Yakima FD #5 moves to ILS the maximum number of recommended BLS aid services would change to 19.

E. PATIENT CARE PROCEDURES (PCPs)

PCPs are defined in WAC as “written operating guidelines adopted by regional councils in consultation with local EMS & trauma care councils, MPDs, and emergency dispatch centers.” Regional PCPs are the foundation for county operating procedures (COPS) and the broad base for local patient care protocols. MPD protocols cannot be in conflict with Regional PCPs. A number of these local COPS have been submitted with the Regional PCPs for DOH review.

1. Status

The Regional Council has developed and put into place the following PCPs to provide direction and guidance for trauma system implementation:

- Patient Care Procedure # 1 - Dispatch
- Patient Care Procedure # 2 - Response Times
- Patient Care Procedure # 3 - Triage And Transport
- Patient Care Procedure # 4 - Interfacility Transfer
- Patient Care Procedure # 5 - Medical Command at Scene
- Patient Care Procedure # 6 - EMS/Medical Control Communications
- Patient Care Procedure # 7 - Helicopter Alert and Response
- Patient Care Procedure # 8 - Diversion
- Patient Care Procedure # 9 - BLS/ILS Ambulance Rendezvous with ALS Ambulance
- Patient Care Procedure #10 - Trauma System Data Collection
- Patient Care Procedure #11 - Routine EMS Response Outside of Recognized Service Coverage Area
- Patient Care Procedure #12 - Emergency Preparedness/ Special Responders

The Regional Planning & Standards Committee reviews and revises Patient Care Procedures every two years and more often if needed. New PCPs are developed as the need arises. The overall **goal** for PCPs and County Operating Procedures (COPS) is to improve and streamline trauma patient and overall patient care within the Region and within counties. PCP and COP **objectives** are to provide an organized approach to care of the trauma patient in the field. Through the State trauma triage tool, Regional PCPs, and COPS, EMS agencies know where to transport trauma patients. Additional **strategies** include a prearranged process for alerting the receiving trauma service and agreements rendezvous with ALS agencies for BLS and ILS agencies when needed.

2. Strengths & Weaknesses

Strengths of the Regional PCP process are that they have been implemented in all counties and updated to reflect the needs of the Region. County Operating Procedures have been developed in five of the six Regional Counties to provide more specific local direction for Regional PCPs.

An additional strength of the Regional PCPs is that the Emergency Dispatch Centers, who have no obligation to follow Regional PCPs, are using PCP # 1, Dispatch. Weaknesses identified in the Regional PCPs have been resolved in the ongoing review and update process.

3. Demographics

The majority of Regional population is located in the four urban areas: Yakima, Tri Cities (Kennewick, Richland, Pasco), Walla Walla and Ellensburg. The influx of migrant farm workers for the agricultural industries influences Regional population. Please, refer to page 37 for **South Central Region Population**. The average age of the Regional population is relatively young, averaging twenty-five to forty-four with a slightly higher

number of males than females. Please refer to page 37 for **Population by Age and Gender**.

See page for **Mortality in the South Central Region** (Benton, Columbia, Franklin, Kittitas, Walla Walla, and Yakima Counties) and page 18 for chart on **Comparison of State and South Central Region Deaths & Injury Related Deaths**.

4. Goals

The Regional Council's **goal** is to have up to date and feasible PCPs that assist the Regional Trauma Plan to function. The Regional Council will continue to pursue its established process for review and update of Regional PCPs. Local EMS & Trauma Care Councils and MPDs are provided the opportunity to review and provide input into the PCPs and trauma plan at least every two years. If incidents occur that require immediate update or change of the PCPs or trauma plan, there is also an established process that can be followed. There are no projected costs for PCPs since they are included as part of the Regional responsibility and closely related to the Trauma Plan.

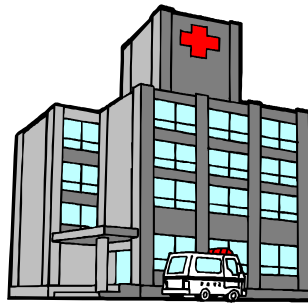
F. CROSS COUNTY OR CROSS/INTER-REGIONAL PREHOSPITAL CARE

Each county is required by Revised Codes of Washington (RCW) and Washington Administrative Code (WAC) to have a mass casualty disaster plan developed by the county's Emergency Management Division. County disaster plans address mass casualty incidents that include EMS, emergency communication, and trauma services resources. County disaster plans are tested annually. Emergency dispatch centers, EMS agencies, and trauma services participate in these drills and often combine resources in other disaster drills throughout the year.

The Regional Council asked each local EMS & Trauma Care Council to review their county's disaster plan to assure that current EMS and trauma services were included and up to date. Regional research showed that some counties do not have disaster drills with neighboring counties, however, all county disaster plans include disaster mutual aid agreements. These agreements detail how the counties will interface with neighboring counties.

The Mid Columbia EMS & Trauma Care Council in Benton and Franklin Counties, have developed a Mass Causality Incident Plan that is incorporated in the two counties disaster plans and drills. EMS agencies and trauma service personnel have been trained as preceptors for in-house training.

Two agencies outside of the South Central Region routinely transport patients to trauma services located within the Region, Klickitat County FD #2 BLS ambulance from Bickleton and Grant County FD #8 BLS ambulance from Mattawa. Both of these agencies obtain EMS OTEP and CME from Yakima County EMS and utilize the Yakima County MPD and his protocols.



V. DESIGNATED TRAUMA SERVICES

Trauma Services are a pivotal part of the trauma system. They provide the definitive initial and prolonged care to trauma patients. Their readiness and resources are vital.

The trauma system in the State of Washington is designed around designation of trauma services. Designation is an elective procedure. Health care facilities that participate make a commitment and choose to do so. Each health care facility seeking a level of trauma service designation, completes a Designation Application Packet. The Designation Application is reviewed by the Department of Health and an onsite survey is completed. The facility trauma system must be in place which include trauma team activation, trauma education, trauma registry data submission, and on going continuous quality improvement (CQI) programs.

The South Central Regional Council recommends the number, level and location of trauma services to DOH based on analysis of population data, numbers of patients meeting trauma criteria, locations of health care facilities, existing EMS transport patterns and estimated EMS transport times. The Regional Council also conducted a survey of Regional health care facilities that provided information on surgical and medical resources available at each facility. Analysis showed a broad spectrum of trauma care and medical staff capabilities, ranging from small rural clinics and hospitals with limited medical resources to large medical centers with sophisticated trauma care equipment and medical specialties. As with EMS resources, higher-level trauma designation and trauma care resources are available in suburban/urban areas. The primary determining factor in designation recommendation for three Level II trauma services, was the long distances between health care facilities with Level II resources and long EMS transport times.

A. CURRENT STATUS

1. Current Trauma Service Resources

COLUMBIA COUNTY

In the town of **Dayton**, the Regional Council recommends one Level IV Designated Trauma Service.

Actual Designation

Dayton General Hospital, in the Town of **Dayton**, is a **designated Level V Trauma Service** with 28 beds and a two bed Emergency Room, staffed by RNs and on call physicians. Three general practice physicians practice at Dayton General. Dayton General is the only health care facility in Columbia County. Dayton General currently does not have anesthesia capabilities and is not eligible for a Level IV trauma designation. (Regional Recommendation for a designated level V trauma service)

KITTITAS COUNTY

In the City of **Ellensburg** the Regional Council recommends one Level III Designated Trauma Service and in the town of **Cle Elum** the Regional Council recommends one Level V Designated Trauma Service.

Actual Designation

Kittitas Valley Community Hospital, in the City of **Ellensburg**, is a **designated Level IV Trauma Service** with 50 beds and provides a full array of medical specialties with the exception of neurosurgery. (Regional recommendation is for a designated level III trauma service)

Kittitas County Public Hospital District #2 Emergency Room, in the town of **Cle Elum**, was a **designated Level V Trauma Service** that provided a four bed "free standing" Emergency Facility staffed by RNs and on call physician assistances, nurse practitioners, and medical directors. Due to economic and political issues this facility closed indefinitely in June 2001. The Regional Council continues to recommend a designated level V trauma service in the Cle Elum area.

BENTON AND FRANKLIN COUNTIES

In **Benton County**, the Regional Council recommends one *designated Level II Trauma Service, one designated Level III Pediatric Trauma Service, and one designated Level II Trauma Rehabilitation Service in the Tri Cities area (Richland, Kennewick, Pasco)*..

Actual Designation

Tri-Cities Trauma Service, located in Richland, Kennewick, and Pasco, is a tri-designated Level III Trauma Service with three campuses as follows:

Kadlec Medical Center, a 153 bed acute care facility, located in the City of **Richland**, provides a full range of medical and surgical services and specialties including neurosurgery and rehabilitation service.

Kennewick General Hospital, a 71 bed acute care facility, located in the City of **Kennewick**, provides full range of medical and surgical services and specialties including neurosurgery.

Lourdes Medical Center, a 135 bed acute care facility, located in the City of **Pasco**, provides a full range of medical and surgical services including neurosurgery. *Lourdes Medical Center* is a designated Level II Trauma Rehabilitation Service.

In the City of **Prosser**, *Prosser Memorial Hospital* is a designated Level IV Trauma Service with 21 beds. They provide a range of medical and surgical services including long-term care.

WALLA WALLA COUNTY

In the **County** and the **City of Walla Walla**, the Regional Council recommends one *designated Level II Trauma Service, one designated Level III Pediatric Trauma Service, and one designated Level II Trauma Rehabilitation Service.*

Actual Designation:

St. Mary Medical Center, located in the City of **Walla Walla**, is a designated Level II Trauma Service, a designated Level III Pediatric Trauma Service, and a designated Level II Trauma Rehabilitation Service with 146 beds providing a full range of medical and surgical services and specialties including neurosurgery and rehabilitation services.

Walla Walla General Hospital, located in the City of **Walla Walla**, is a designated Level III Trauma Service with 72 beds providing a full range of medical and surgical services with the exception of neurosurgery.

YAKIMA COUNTY

In **Yakima County**, the Regional Councils recommends the following: in the **City of Yakima**, *one designated Level II Trauma Service, one designated Level III Pediatric Trauma Service and one Level II Trauma Rehabilitation Service; in the City of Toppenish, one designated Level III Trauma Service; and in the City of Sunnyside, one designated Level III Trauma Service.*

Actual Designation:

Yakima Valley Trauma Service, in the City of **Yakima**, is a joint designated Level III Trauma Service and a Level III designated Pediatric Trauma Service with campuses at Yakima Valley Memorial Hospital and Yakima Providence Medical Center. Yakima Providence Medical Center is a Level II designated Trauma Rehabilitation Service. Trauma service is provided on a daily rotation basis.

Yakima Valley Memorial Hospital has 226 beds, providing a full range of medical and surgical services including neurosurgery, pediatric and psychiatric services.

Yakima Providence Medical Center has 226 beds, providing a wide range of medical and surgical specialties including neurosurgery, cardiothoracic surgery, and rehabilitation.

Providence Toppenish Hospital, located in the City of **Toppenish** on the Yakama Reservation, is a designated Level IV Trauma Service with 63 beds, providing a wide variety of medical services and specialties with the exception of neurosurgery. (Regional recommendation for a designated level III trauma service)

Sunnyside Community Hospital, located in the City of **Sunnyside**, is a designated Level III Trauma Service with 38 beds, providing a full array of surgical and medical services with the exception of neurosurgery.

Trauma Rehabilitation Services Resources

The State of Washington Trauma System is unique by including designated Trauma Rehabilitation Services. Washington's trauma system considers rehabilitation early in care of both adult and pediatric trauma patients. WAC 246-976 provides levels and requirements for designation of Trauma Rehabilitation Services. State designation of Trauma Rehabilitation Levels I and II follows the standards adapted from the Commission on Accreditation of Rehabilitation Facilities (CARF).

All designated Level II Trauma Rehabilitation Services are required to have trauma rehabilitation coordinators, who are responsible for trauma patient rehabilitation care from ED admission through discharge. All Level III Trauma Services are to have trauma rehabilitation resources available or have transfer agreements with designated trauma rehabilitation services.

When developing recommendations for minimum and maximum numbers and levels of designated trauma rehabilitation services, the Regional Council established a Rehabilitation Committee with representatives from health care facilities that provide trauma rehabilitation. A survey of trauma rehabilitation needs and resources was done and the results analyzed.

Keeping in mind that trauma rehabilitation involves patients, families, and even communities, the Regional Council asked DOH to designate a Level I Trauma Rehabilitation Service for the Eastern portion of the State. The South Central Region EMS & Trauma Care Council recommends three Level II Trauma Rehabilitation Services in the Cities of Yakima, Tri Cities (Richland, Kennewick, and Pasco), and Walla Walla. DOH did designate a Level I Trauma Rehabilitation Service in Spokane and designated the three Level II Trauma Rehabilitation Services as recommended by the Regional Council. In addition to the designated trauma rehabilitation services, many health care facilities offer a variety of out-patient and home health rehabilitation services.

Pediatric Trauma Services

WAC defines a "pediatric trauma patient" as a child known or estimated to be less than fifteen years of age. WAC provides designation for Levels I through III Pediatric Trauma designation. The Pediatric Trauma service designation has specific medical and surgical equipment and specialized pediatric care training requirement.

The Regional Council once again surveyed and evaluated specialized pediatric trauma and medical resources available through its Regional health care facilities. The conclusion of the analysis was that Regional pediatric trauma resources were consistent with Level III pediatric trauma service requirements.

The Regional Council then analyzed its large geographic area, pediatric trauma patient population, access to Level I and II Pediatric Trauma Services and pediatric trauma care

resources available within the Region. The Regional Council recommended to DOH that three *Level III Pediatric Trauma Services* be designated in the same areas where Adult Level II Designated Trauma Services were recommended in the Cities of Yakima, Walla Walla, and Tri Cities.

2. Trauma Services Resources For Trauma Specialty Injuries

The following medical and surgical resources are available through trauma services within the Region:

Yakima Providence Medical Center in Yakima provides cardio-thoracic surgery capabilities. *Kadlec Medical Center* in Richland is planning an open-heart surgery center in the near future.

Yakima Valley Trauma Service in the City of Yakima, *Tri-Cities Trauma Service* located in Richland, Kennewick, Pasco, and *St. Mary Medical Center* in Walla Walla provide care for traumatic brain and spinal cord injuries.

Yakima Valley Memorial Hospital in the City of Yakima and *Kadlec Medical Center* in the City of Richland has neonatal intensive care capabilities.

Advanced medical and surgical resources not available from the Regional trauma services include critical burns and critical pediatric patient care. All Regional Trauma Services have interfacility transfer agreements and plans in place to transfer both critical burn patients and critical pediatric patients to Level I Trauma Services located in Seattle, Washington or Portland, Oregon.

3. Remaining Need for Trauma Services

The South Central Regional Council determined the need for level II Designated Trauma Services in the cities of Yakima and the Tri Cities (Richland, Kennewick, Pasco). Yakima Valley Trauma Service, located in Yakima, and the Tri City Trauma Service, with campuses in Richland, Kennewick and Pasco, have designated as level III trauma services.

Designated level III Trauma Services have been recommended in Ellensburg and Toppenish. Toppenish Providence, located in the town of Toppenish, and Kittitas Valley Community Hospital, located in the City of Ellensburg, have designated as level IV trauma services. One trauma service did cost projections of half a million to two million dollars to increase trauma designation levels from level III trauma service to a level II trauma service. The Regional Council will continue to encourage and support efforts by trauma services that designated lower than Regional recommendations to increase their trauma service designation levels.

Two Regional trauma services have used interesting approaches to the delivery of trauma care by using two creative designation configurations. Yakima Valley Trauma Service, a level III designated trauma service in the City of Yakima, is a “joint” designation with Yakima Valley Memorial Hospital and Yakima Providence Medical Center. In the Tri Cities (Richland, Kennewick, Pasco) an even more creative Level III “tri designation” trauma service exists. Kadlec Medical Center in Richland, Kennewick General Hospital

in Kennewick and Lourdes Medical Center in Pasco, share a designation with three campuses. This trauma system has an elaborate system of trauma call, utilizing designated telephones in each emergency department that allow for immediate communications among the three campuses.

The Regional Council continues to recommend a level V designated trauma service for the Cle Elum area. This need is supported by the long transport times from the upper Kittitas County area to the trauma service in Ellensburg.

4. Trauma Service Training Needs

a. Trauma Service Workforce Resources

WAC requires a “one time completion” of specific trauma training courses. Surveys of designated trauma services within the Region showed that staff and physicians have met the trauma training WAC requirement. Trauma training grants for trauma training have now been eliminated, however the need for trauma training is on going. Trauma services will now be required to absorb both initial trauma training for new staff and re-certification for established staff.

The following is a review of the current workforce available at Regional Trauma Services:

Trauma Services Workforce Resources

<i>County/Trauma Service</i>	<i>ED Nurses</i>	<i>ICU Nurses</i>	<i>OR, PACU Nurses</i>
Benton County			
<i>Prosser Memorial Hospital</i> Level IV	8	0	3
<i>Tri City Trauma Service</i> (Tri-joint) Level III			
<i>Kadlec Medical Center</i>	30	32	40
<i>Kennewick General Hospital</i>	21 RN 2 LPN	16 1 LPN	16 OR/RN 7 OR/LPN 6 PACU
Franklin County			
<i>Lourdes Medical Center</i>	20	16	13 OR 4 PACU
Columbia County			
<i>Dayton General Hospital</i> Level V	12	(Same 12)	0
Kittitas County			
<i>Kittitas Valley Community Hospital</i> Level IV	13	9	6 OR 2 PACU
Walla Walla County			
<i>St. Mary Medical Center</i> Level II	13	18	9
<i>Walla Walla General</i>	11	10	7 OR

<i>Hospital Level III</i>			8 PACU
Yakima County			
<i>Yakima Valley Trauma Service Joint Level III</i>			
<i>Providence Yakima Medical Center</i>	22	24	15 OR 11 PACU
<i>Yakima Valley Memorial Hospital</i>	41	35	10 OR/RN 12 OR/Techs 10 PACU
<i>Sunnyside Community Hospital Level IV</i>	13	10	5 OR 3 PACU
<i>Toppenish Providence Hospital Level IV</i>	13	12	3 OR 2 PACU

Trauma Rehabilitation Workforce Resources

County/ Trauma Service	RNS	CRRNS
Benton County		
<i>Kadlec Medical Center</i>	8	2
<i>Columbia Home Health</i>	9	1
<i>Kennewick General Home Health</i>	16	0
Franklin County		
<i>Lourdes Medical Center, Level II</i>	15	2
Walla Walla County		
<i>St. Mary Medical Center Turning Point, Level II</i>	18	4
Yakima County		
<i>Yakima Providence Medical Center Level II</i>	13	6



b & c. Trauma Services Training Needs and Resources

To provide the best possible trauma patient care, the most up to date trauma training is necessary for physicians, surgeons, and trauma service personnel. A 2000/2001 DOH survey showed that on a statewide basis, all designated trauma

services have met trauma designation training requirements. Funds for continuing trauma training for trauma services have therefore been eliminated.

In the South Central Region, classes such as Trauma Nurse Core Curriculum (TNCC), Pediatric Advanced Life Support (PALS), and Advanced Cardiac Life Support (ACLS) are provided for trauma service's staff at regular intervals by community colleges or through classes sponsored by the trauma services. Additionally, Advanced Trauma Life Support (ATLS), specifically for physicians, is not always readily available in Washington State. Physicians often travel long distances to take this required class.

Trauma services also usually pay their staff representatives for their participation in regional CQI meetings and activities. With increased trauma training and designation expenses, some trauma services may find it necessary to lower their designation level or drop it all together.

d. Strengths & Weaknesses

The major strength in Regional trauma service designation is that all health care facilities within the Region have designated as trauma services. A perceived weakness of the Regional trauma system is that trauma services in Ellensburg, Dayton, Yakima, Toppenish, and the Tri Cities (Richland, Kennewick, Pasco), have designated at levels below the Regional Council's recommendations. The Regional Council will continue to encourage and support the efforts of these trauma services to increase their trauma service designation levels to the Regional Councils recommendations. Barriers to increasing level of designation are cost and lack of medical staff and surgeons. One trauma service evaluated the projected cost to increase designation levels with an estimated cost of half to two million dollars. The creative trauma designation configurations of a joint designation in the City of Yakima and a tri-designation in the cities of Richland, Kennewick, and Pasco are both a strength, with participation by all facilities, and a weakness, with lower than recommended levels of trauma designation.

The South Central Region is experiencing the same nursing shortage that is plaguing the nation. Most health care facilities within the region utilize "traveling nurse services" to make up for the shortage of nurses. Use of these services greatly increases nursing care cost for facilities.

Sunnyside Community Hospital and Lourdes Medical Center have taken a different approach in address the nursing shortage and will be importing at least ten foreign trained registered nurses to help cover their shortages. Sunnyside Community Hospital also is becoming a training center for Osteopathic Physicians. They have signed agreements with the University of Health Sciences in Kansas City, Mo., Western University in Pomona, CA., and Touro University in Vallejo, CA. Medical students will rotate through Sunnyside Community hospital to obtain clinical training in the following medical specialties: family, internal, surgery, pediatrics, and obstetrics/gynecology. The

Region has three schools of nursing in Yakima, Pasco, and Walla Walla, that graduate new nurses every year. However, these new nurses often leave the

Region for more urban population centers where pay is higher and more specialized positions are available.

The economic condition of small rural health care facilities continues to be a concern and weakness. Rural hospitals and clinics are struggling to survive in the ever-changing realm of medical care, which is demonstrated in the June 2001 closure of the level V designated trauma service in Cle Elum.

B. DEMOGRAPHICS



South Central Region Total Licensed Vehicles and Licensed Drivers

County	Licensed Drivers	Passenger Vehicles	Trucks
Benton	101,543	83,506	33,178
Columbia	3,208	2,309	2,137
Franklin	30,176	27,301	14,591
Kittitas	23,763	16,595	10,983
Walla Walla	34,996	25,158	11,623
Yakima	143,255	120,977	58,815
Totals	336,941	275,846	131,330

The South Central Region averages over 200 days a year of sunshine. This sunny growing climate makes agriculture the main Regional industry. We are recognized as the “fruit bowl, and “bread basket” of the nation. The population of the Region is greatly influenced by the influx of migrant farm workers who come in the spring and stay through harvest in the fall. Farm and orchard injuries are highest during these times. Migrant workers can be at a greater risk of injury due to the very nature of their work with the added detriment of language barriers. The sunny weather also contributes to many outdoor sports and recreation activities. The Region host several events that bring many visitors to our area such as the Hydroplane Races in the Tri Cities, the Ellensburg Rodeo, and the Hot Air Balloon Festival in Walla Walla. Anytime there is an increase in travel to and from the area and citizens participating in outdoor activities, the likelihood of personal injury is increased.



Paved and Unpaved Roads in Each County

➡

County		100	200	300	400	500	600	700	800	900	1000	1100	
		Mile	Mile	Mile	Mile	Mile	Mile	Mile	Mile	Mile	Mile	Mile	
Benton County	Paved	584											
	Unpaved	289											
	State RT	218											
Franklin	Paved	564											

County	Unpaved	434		
	State RT	137		
Walla Walla County	Paved	530		
	Unpaved	440		
	State RT	139		
Yakima County	Paved	1079		
	Unpaved	642		
	State RT	299		
Columbia County	Paved	139		
	Unpaved	364		
	State RT		44	
Kittitas County	Paved	486		
	Unpaved	74		
	State RT	196		

C. GOALS

The Regional **goal** of participation and trauma designation by health care facilities within the Region has been realized. However, several trauma services designated at levels below the Regional Council's recommendations. Two trauma services have used some creative designation configurations with a joint designation in the City of Yakima and a tri-designation in the cities of Richland, Kennewick, and Pasco. The Regional Council will continue to encourage trauma services to designate to the recommended levels.

1. Methods to Establish or Re-establish Recommended Minimum and Maximum Recommendations For Regional Trauma Services.

The Regional Council has recommended to DOH, the number, level and location of trauma services utilizing analysis of population data, numbers of patients meeting trauma criteria, locations of health care facilities, existing EMS transport patterns and estimated EMS transport times. The South Central Regional Council also conducted a survey of Regional health care facilities to obtain information on surgical and medical resources available at each facility. Analysis showed a broad spectrum of trauma care and medical staff capabilities, ranging from small rural clinics and hospitals with limited medical resources to large medical centers with sophisticated trauma care equipment and medical specialties. As with EMS resources, the highest levels of trauma care resources are available in suburban/urban areas. The primary determining factors in designation recommendations for three Level II trauma services were the long distances between health care facilities with Level II resources and long EMS transport times.

The recommended minimum and maximum numbers of designated trauma services are reviewed every two years as part of the Regional trauma plan update. Designated trauma services in Ellensburg, Dayton, Yakima, Toppenish and the Tri Cities designated at a lower than Regional recommended levels. The greatest barrier for level III trauma services to increase designation levels to level II is cost. Some trauma services have estimated that the cost for a level III trauma service to upgrade to a Level II ranges from half a million to two million dollars. The cost for a level IV trauma service to move to a level III designation could be somewhat less. The greatest single cost for trauma services to increase designation levels is recruitment of specialty physicians and surgeons. Other additional cost includes specialty equipment, staff training and staff salaries. The Regional Council will continue to encourage and support efforts of the trauma services who designated at lower levels to increase their designation levels, as they are able. The

Regional Council also supports and encourages the reopening of the Kittitas PHD #2 level V designated trauma service in the Cle Elum area.

TABLE C
SOUTH CENTRAL REGION
FY 02/03 Regional Plan

Min/Max Numbers for Acute Trauma Services

LEVEL	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
II	3	3	1	3	3
III	3	3	4	3	3
IV	2	2	3	1*	2
V	2	2	2	1*	2
IIP	1	1	0	0*	1
IIIP	2	3	2	3*	3

Min/Max Numbers for Rehabilitation Trauma Services

LEVEL	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
II	3	3	3	3	3
III+			0		

+ There are no restrictions on the number of Level III Rehab Services

*Recommendations for minimum and maximum numbers and levels of designated trauma services, pediatric designated trauma services, and designated trauma rehabilitation services have been reviewed. The Regional Council recommendations from the first trauma plan are reflected in the minimum numbers. Minimum and maximum trauma service numbers have become confused over the years due to the fact that two health care facilities not initially recommended by the Regional Council were designated and that other health care facilities have designated at levels lower than Regional Council recommendations. The Regional Council continues to encourage trauma services to increase designation levels to the recommendations in this Trauma Plan.

VI. DATA COLLECTION

The Regional Council has long recognized that Trauma Registry data is crucial to future trauma system planning and implementation. Data provides the statistics for evaluation of the evolving trauma system. WAC 246-976-430 directs *designated* trauma services and trauma *verified* EMS agencies to collect and submit trauma data to the state Trauma Registry. For nine years, DOH encouraged collection of prehospital data with limited success. Starting in 2001, EMS will still be responsible to collect prehospital data but will no longer submit data directly to the state trauma registry. Prehospital data will be provided to receiving trauma services who then will submit the EMS data.

To further reinforce State WAC regulations for Trauma Registry data, the Regional Council developed a Regional Patient Care Procedure # 10, Trauma System Data Collection. The regional Continuous Quality improvement (CQI) Committee, recognizing the importance of EMS trauma data, supported the Regional Council's data collection **goal** by providing financial support for printing of a Regional First Responder Aid Service short report form.

The Regional Council is not clear what its responsibility will be in the transition of prehospital trauma data being submitted by trauma services. The Region no longer has funds for the Regional Data Coordinator position. The individual who held that position has been volunteering her time to help prehospital providers with the Collector software program.

A great concern of the trauma services is obtaining complete run sheets from EMS providers. Once again it is unclear what the Regional Council's role and responsibility will be in assisting with this transition.

VII. EMS AND TRAUMA SYSTEM EVALUATION

Effectiveness and Quality Assurance

WAC establishes and outlines the EMS and Trauma System Evaluation process (CQI Plan). Regional CQI Plan development is the responsibility of Level I, II, and III trauma services. The regional CQI Committee, comprised of representatives from the Regional trauma services, has developed a CQI Plan with a goal to use analysis of trauma registry data to identify and monitor trends in Regional trauma system care. The CQI Plan identifies the use of timely analysis of trauma system trends through actual trauma patient care issues. In addition, all South Central Region designated trauma services have their own internal continuous quality improvement CQI programs that assess and monitor the effectiveness of their individual trauma system response and trauma patients' care.

Confidentiality of CQI issues and meetings has always been a concern. The regional CQI Plan addresses confidentiality issues by having all members and guests sign a Confidentiality Agreement as outlined in RCW 70.168.090 (3 & 4).

County Medical Program Directors also are periodically to assess educational performance, skill maintenance, and field performance of EMS personnel for quality improvement purposes. DOH now offers a program that provides confidentiality protection for MPDs when conducting CQI activities including run review. To date, all Regional MPDs are doing run reviews.

The regional CQI Committee meets quarterly and reviews trauma system outcomes, concerns, trends if available, and reviews pertinent trauma cases. The CQI Committee monitors unexpected trauma patient survivals and deaths, numbers and types of interfacility trauma transfers, and other cases related to the performance of the Regional trauma system.

With the end of FY 2001, the Regional Councils technical support of CQI Committee activities will end. The Regional Council has provided clerical and technical support for such activities as mailings and financial management of CQI grants. The Regional Council has asked the CQI Committee to provide a report following each of their quarterly meetings. A Regional Council representative will continue to attend CQI meetings.

As trauma system patient care trends and trauma system issues are identified, the regional CQI Committee will be able to provide the Regional Council with statistics and information that can guide further revision and update of the Regional PCP's, trauma plan and trauma system. The analysis of trauma system trends will thus become the very tool that measures the success of the statewide and Regional trauma system.

Through Trauma Registry data analysis by the CQI Committee, the Region and the state will have tangible proof of the great value of organized trauma system care.

ADDEMDUM

ACRONYMS

ACLS	Advanced Cardiac Life Support
ALS	Advanced Life Support
ALS	Advanced Life Systems (Company)
AMR	American Medical Response
APLS	Advanced Pediatric Life Support
ATLS	Advanced Trauma Life Support
BLS	Basic Life Support
BTLS	Basic Trauma Life Support
CAAHEP	Commission on Accreditation of Allied Health Education Programs
CARF	Commission on Accreditation of Rehabilitation Facilities
CBC	Columbia Basin College
CBD	Criteria Based Dispatched
CBD/EMS	Criteria Based Dispatch/Emergency Medical Dispatch
CBDR	Columbia Basin Dive Rescue
CME	Continuing Medical Education
COPs	County Operating Procedures
CPR	Cardio-Pulmonary Resuscitation
CQI	Continuous Quality Improvement
CSEPP	Chemical Stockpile Emergency Planning Process
DOH	Department of Health
DOT	Department of Transportation
ED	Emergency Director
EMD	Emergency Medical Dispatch
EMS	Emergency Medical Service
ENPC	Emergency Nurses Pediatric Course
FABULAS	First Aid Basics You Learn At School
FTE	Full Time Equivalent
HAMMER	Hazardous Materials Management Emergency Response
ICU	Intensive Care Unit
ILS	Intermediate Life Support
IPPE	Injury Prevention Public Education
MPDs	Medical Program Directors
OTEP	Ongoing Trauma Education Program
PALS	Pediatric Advanced Life Support
PAR	Post Anesthesia Recovery
PCP	Patient Care Procedures
PHTLS	PreHospital Trauma Life Support
RCW	Revised Codes of Washington
RFP	Request for Proposal
SAM	Safety Always Matters
SMART	Specific, Measurable, Attainable, Realistic, Time-Based
TAC	Technical Advisory Committee
TNCC	Trauma Nurse Care Curriculum

UDA
WAC

Uniform Disciplinary Act
Washington Administrative Code